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Architects Service Catalog

Table of Contents

SECTION 1
Production Facilities
Pages 2-14

SECTION 2
Physical Properties of Georgia Marble
Pages 16-20

SECTION 3
Details of Prominent Georgia Marble Studies, with Photographs
Pages 22-41

Flagging—Doorways—Mantels
Pages 42-47

Standard Specifications
Pages 48-50

SECTION 4
Colors and Finishes
Pages 52-67

THE GEORGIA MARBLE COMPANY

Main Office and Quarries
TATE, GEORGIA

Plants at Tate, Georgia; Nelson, Georgia, and Marietta, Georgia

Service Offices

Bona Allen Bldg.,
Atlanta, Ga.

Monadnock Bldg.,
Chicago, Ill.

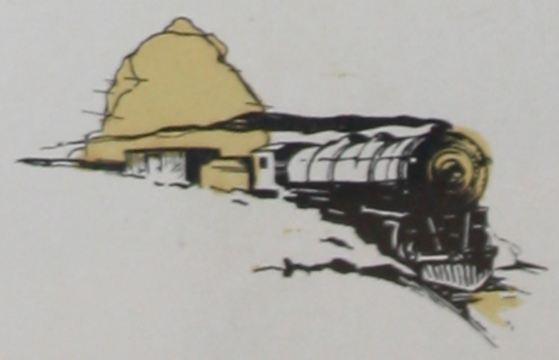
Marbridge Bldg.,
New York, N. Y.

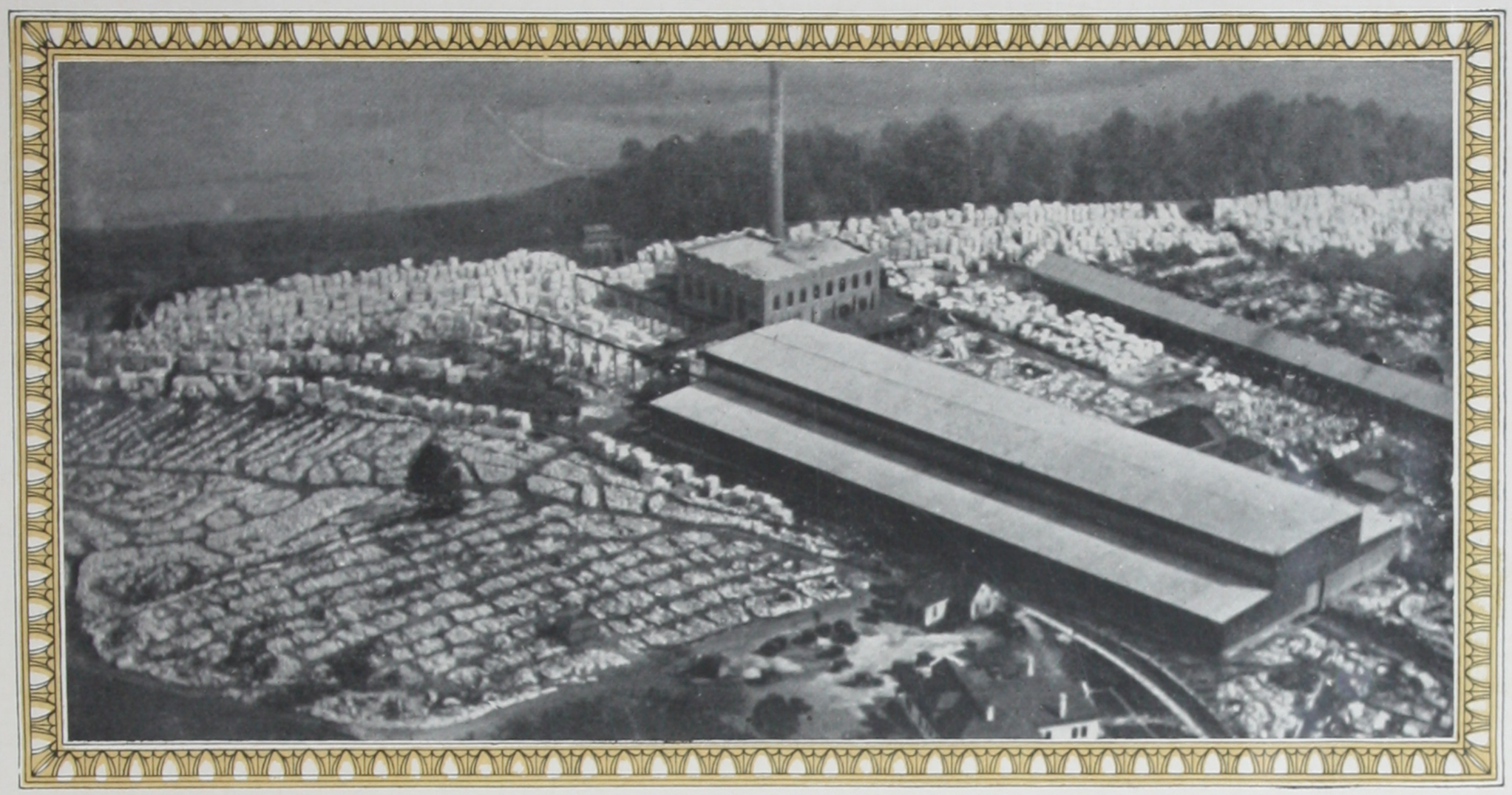
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THE GEORGIA MARBLE COMPANY PLANTS AT TATE, NELSON, AND MARIETTA, GEORGIA, ARE SLIGHTLY NORTH OF CENTRAL GEORGIA. A CIRCLE WITH A RADIUS OF 1,000 MILES COVERS PRACTICALLY ALL OF EASTERN, CENTRAL, SOUTHEASTERN, SOUTHWESTERN AND MIDWESTERN UNITED STATES. FREIGHT RATES ARE EQUITABLE. A NUMBER OF RAIL ROUTES OFFER RAPID SERVICE TO ALL SECTIONS OF THE COUNTRY. THE PORTS OF SAVANNAH, JACKSONVILLE AND NEW ORLEANS ARE NEARBY AND EXPEDITE FOREIGN SHIPMENTS AND SHIPMENTS TO POINTS WHERE WATER RATES ARE ADVANTAGEOUS.





AIRPLANE VIEW OF THE TATE PLANT OF THE GEORGIA MARBLE COMPANY. NOTE THE GREAT NUMBER OF MARBLE BLOCKS IN RESERVE ABOUT THE PROPERTY. MORE THAN 200,000 CUBIC FEET OF MARBLE IN THE ROUGH IS KEPT ON HAND AT ALL TIMES. WITH THIS TREMENDOUS STOCK THERE IS NO DELAY WHEN AN ORDER IS RECEIVED, NO MATTER HOW BIG THE ORDER MAY BE.

THE architect studies a small block of Georgia Marble on the desk before him. In tint, it harmonizes with the color scheme he has conceived. It is highly satisfactory as to quality. The price is in accord with the building appropriation available. From the standpoint of all physical properties he is satisfied. Only one question remains—a natural one—"What of the company behind the product?"

The architect wishes to know, before specifying any material to be used in considerable volume, that the manufacturer is capable of producing the required material, in the quantity desired, well within the specified time. How often he must wish it possible to visit the plants of each of the manufacturers who furnish him major building supplies. It would certainly be most satisfying to him to see for himself the extent of the manufacturers' raw material resources, the skill of their operators, the completeness of their equipment and all other factors that have an influence on their ability to deliver high grade materials in accordance with all specifications, written and implied.

Frequently architects visit the quarries and plants of the Georgia Marble Company and are warmly welcomed, but often trips of inspection are inconvenient.

For this reason we have devoted the first section of the Georgia Marble Company catalog to a discussion of the facilities of the Georgia Marble Company insofar as they have a bearing on manufacturing ability and the type of service possible for us to render.

The Quarries of the Georgia Marble Company

Georgia Marble is quarried from a mammoth block of crystalline marble which covers the entire bed of a beautiful valley located in Pickens County, in the north central part of Georgia. This block is three miles long and three-eighths of a mile wide. Its depth has never been fathomed. The





VIEW FROM THE AIR OF THE NELSON UNIT OF THE GEORGIA MARBLE COMPANY, LOCATED AT NELSON, GEORGIA. THIS IS ONE OF THE MOST MODERNLY EQUIPPED MARBLE MANUFACTURING PLANTS IN AMERICA. HERE THE MARBLE FOR MANY OF AMERICA'S MOST BEAUTIFUL BUILDINGS HAS BEEN PRODUCED. AMONG THE NOTABLE PIECES OF EQUIPMENT OPERATED AT NELSON IS A HUGE LATHE CAPABLE OF TURNING COLUMNS UP TO THIRTY FEET BY SIX FEET.

longest drills have gone down 185 feet and have failed to reach bottom. For all that is known the block may be a half mile deep.

Grant that it is only 200 feet deep. With the known dimensions and with this arbitrary depth assumed, the mass would contain 6,272,640,000 cubic feet of marble. Such a vast supply of material is difficult to imagine. To aid the mind in conceiving it let us mentally picture a city composed of 100,000 buildings as large as the New York Stock Exchange Annex. This city could be built of the marble in the deposit.

Another aid to visualization is furnished in the statement that the Georgia Marble Company can continue to quarry marble at double the present rate for eighteen centuries.

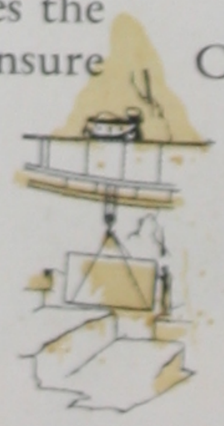
As has been said, the marble deposit is found in the form of a solid mass. It is not stratified. Therefore it cuts as well in one direction as it does in another. Furthermore, this freedom from stratification eliminates the necessity of setting on natural bed to insure against weathering. This precaution must be taken with many stones.

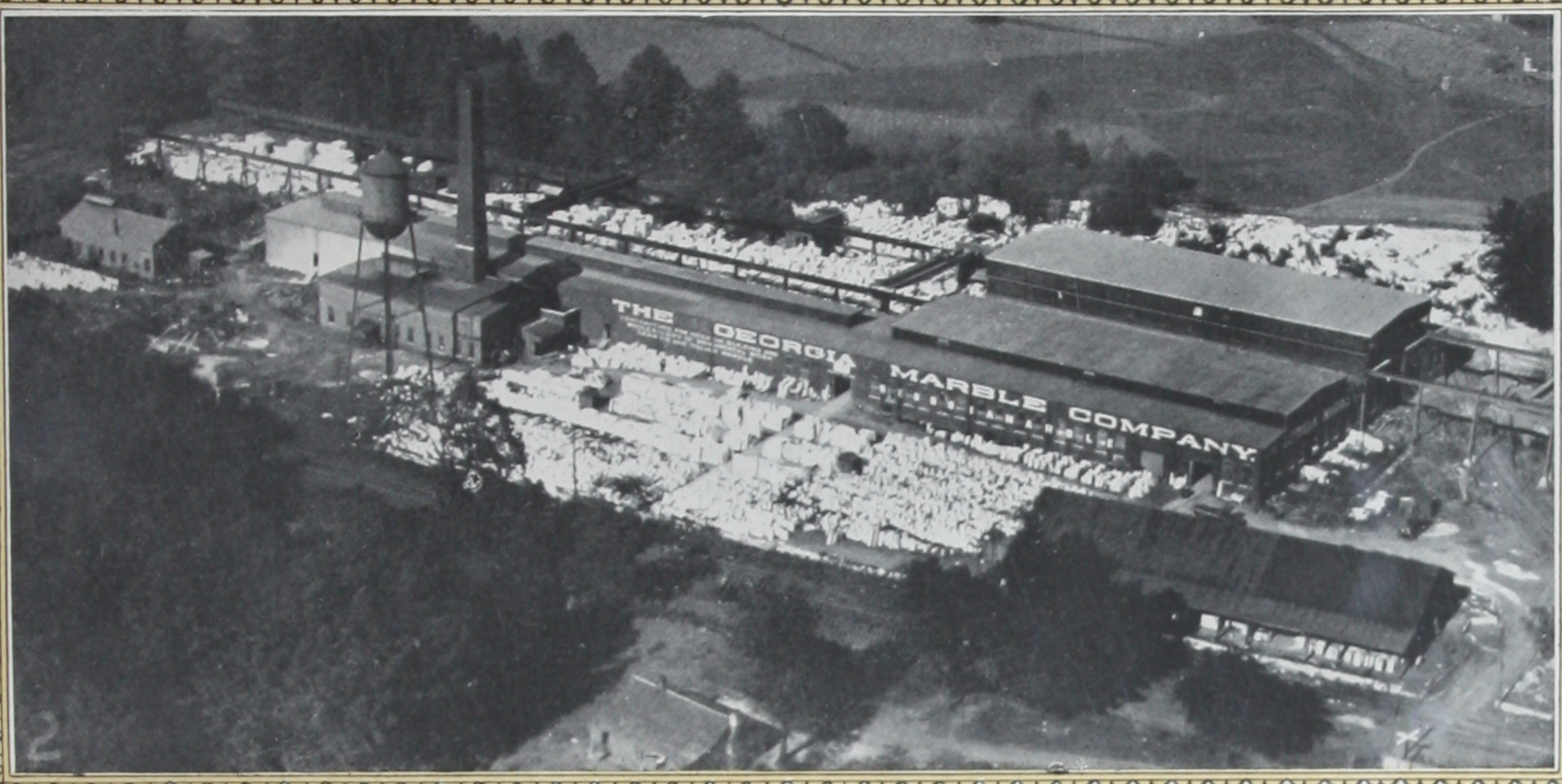
How Georgia Marble Is Quarried

Eight quarries, capable of producing upward of 1,000,000 cubic feet of marble per year are operated by the Georgia Marble Company. Due to the equable climate that is enjoyed in this section quarrying activities are carried on throughout the entire twelve months. More than 200 quarrymen are employed in the work of bringing the marble blocks to the surface. These men are workmen of the highest type, especially chosen for their knowledge of advanced quarrying methods.

Such skill is essential, for the work of wresting a huge block of Georgia Marble from the "Mother Lode" is a Herculean task. There is no such thing as blasting the block loose. Georgia Marble in its natural bed is a massive unit of solid, compact material.

To aid the quarrymen the Georgia Marble Company uses the latest and most efficient





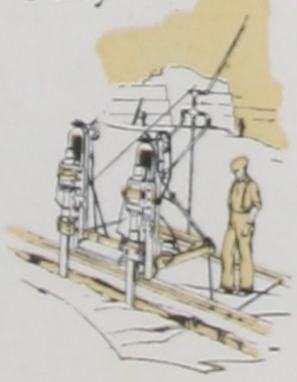
AIRPLANE VIEW OF THE GEORGIA MARBLE COMPANY PLANT, OPERATED AT MARIETTA, GEORGIA. AGAIN YOU SEE A LARGE STOCK OF ROUGH MARBLE ON HAND READY FOR IMMEDIATE USE. AS IN ALL PLANTS OF THE COMPANY, THE MOST MODERN MACHINERY IS USED AND THE MOST HIGHLY SKILLED OPERATORS ARE EMPLOYED. THERE ARE MANY MEN IN THE SERVICE OF THE GEORGIA MARBLE COMPANY WHO HAVE BEEN WITH THE COMPANY PRACTICALLY SINCE ITS FORMATION OVER 40 YEARS AGO.

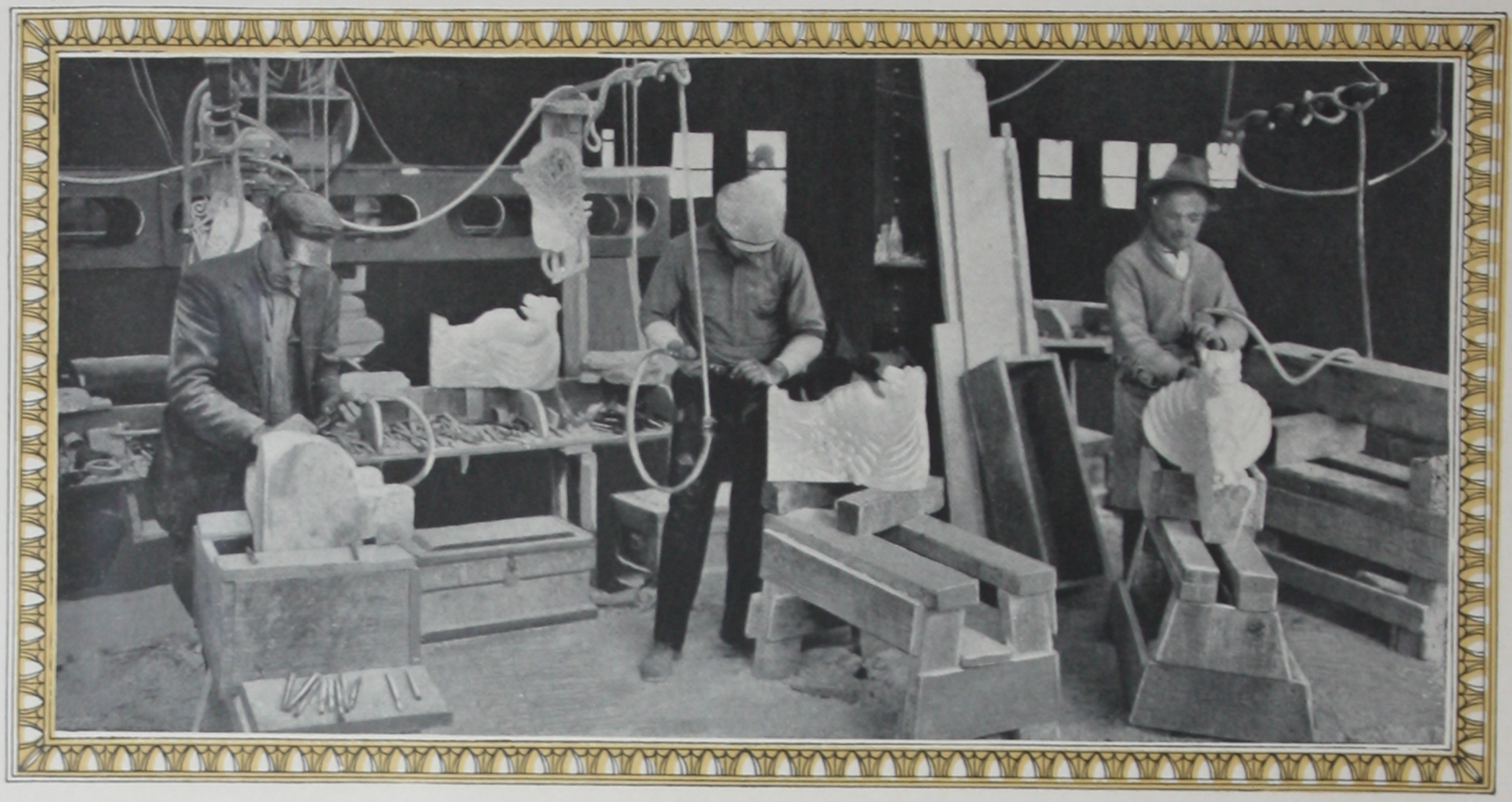
quarrying equipment. In fact Georgia Marble Company engineers have played a leading part in the development of a number of advanced quarrying machines now in general use. (The most interesting and valuable of the machines originated here is the double channeling machine which has greatly increased the efficiency of quarrymen and decreased the time necessary to free the marble from the bed).

The channeling machine performs the first quarrying operation. This machine, fitted with two sets of sharp tools, travels back and forth on steel rail tracks. The tools deliver rapid and powerful strokes. Slowly but surely they cut a narrow vertical channel through the solid mass of marble. As they go through the bed the cuttings are removed by water that flows into the channel and washes out the pulverized waste.

When the channel cuts have been made the block is free on its four vertical sides. Only at its base is it held to the mass. It is now necessary to undercut the block in order to release it. This is accomplished by drilling a series of horizontal holes in a straight line beneath the block. When a series of them have been drilled, wedges are driven into the holes. The block is raised from the bed to allow a heavy chain to be fastened about it. The hook of a derrick is fastened to this chain. A hand is waved from the quarry floor and, high above, the derrick engineer opens the throttle and the block comes forth from its age-old resting place to enter into the service of man.

One after another the blocks are cut loose on the same tier, working towards the wall of the quarry. Then another opening is made on the quarry floor and the work begins on the next level. Slowly but surely the quarry wall grows higher and the bed of the quarry sinks into the earth. In some of the quarries now operated the present work is being carried on 150 feet below the surface.





CARVING CANNOT BE ARTISTICALLY PRODUCED BY MACHINERY. MEN WHO ARE HIGHLY SKILLED IN THEIR CRAFT AND WHO HAVE A GREAT DEAL OF THE ARTIST IN THEIR MAKEUP ARE NECESSARY TO PRODUCE ARTISTIC CARVING. SUCH MEN ARE HARD TO FIND, BUT THE GEORGIA MARBLE COMPANY IS FORTUNATE IN HAVING A LARGE STAFF OF THE FINEST CARVERS IN AMERICA.

Huge Stock on Hand

It will be realized from the foregoing that the work of quarrying is difficult and requires time. One can see that it is impossible to wait until orders are received before quarrying the needed rough stock. It is necessary to keep a complete supply of marble blocks on hand at all times.

This stock is stored in wide areas about the plants of the Georgia Marble Company. The blocks are brought to the yards from the quarries over a railroad system that resembles the elaborate branches and connecting units of a big national system, in miniature. Over 2,000 blocks are always kept on hand in these yards. More than 200,000 cubic feet of marble, in the rough, is usually kept in reserve.

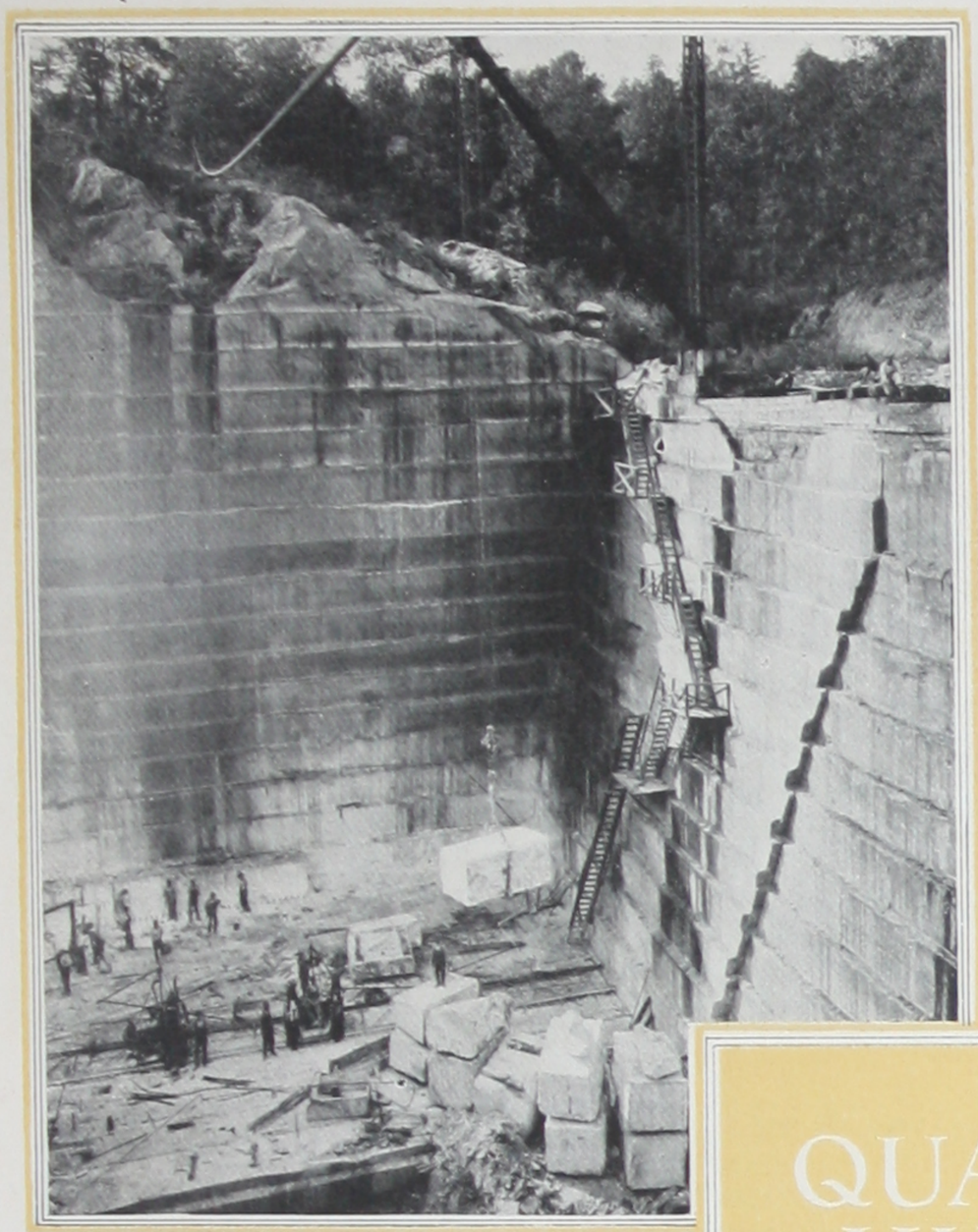
This stock of marble is as carefully watched as is the stock in a department store. Regular inventories are taken to insure against depleted stocks of any of the various kinds of Georgia Marble in general use. When the reserve stock of any variety begins to run low, extra quarrying efforts are made to build up a sufficient supply to care for the largest order and the most remote eventuality.

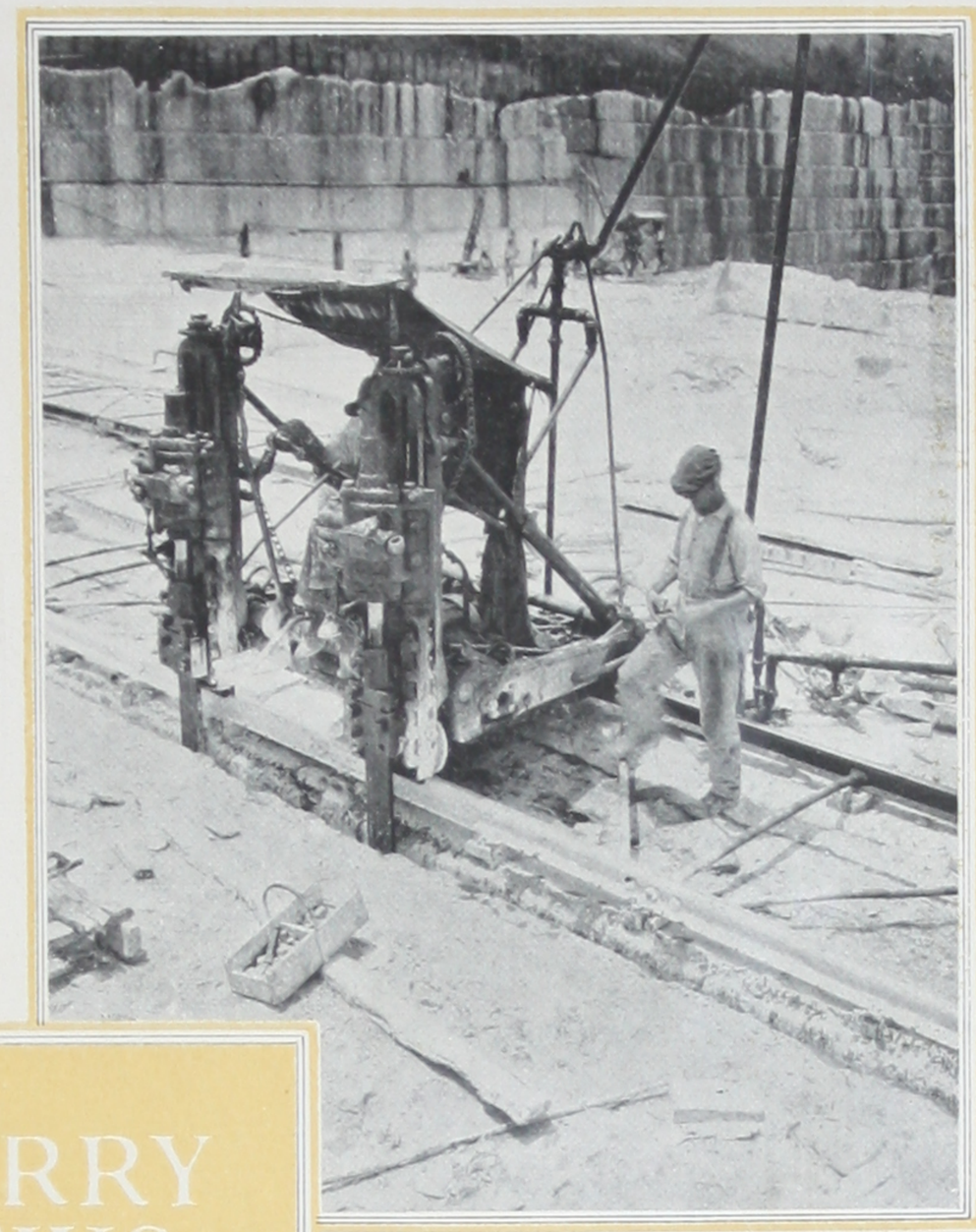
One of the most remarkable things about the storage yards, to the layman, is the careful checking system used in handling the blocks. Information about every block in the yards of the Georgia Marble Company is kept on record. This information, together with a knowledge as to the location of the block in the storage yards, enables the Georgia Marble Company to select the marble for every type of work accurately and quickly. Without hesitation we can choose a block or blocks that fill specifications and cut with the minimum of waste.

Stock of Standard Thicknesses

In the case of orders for stock of standard thicknesses the time of delivery is still further shortened due to the fact that slabs of these sizes are made up in advance and held in stock awaiting use. When an order is received large slabs of the desired thickness are cut to

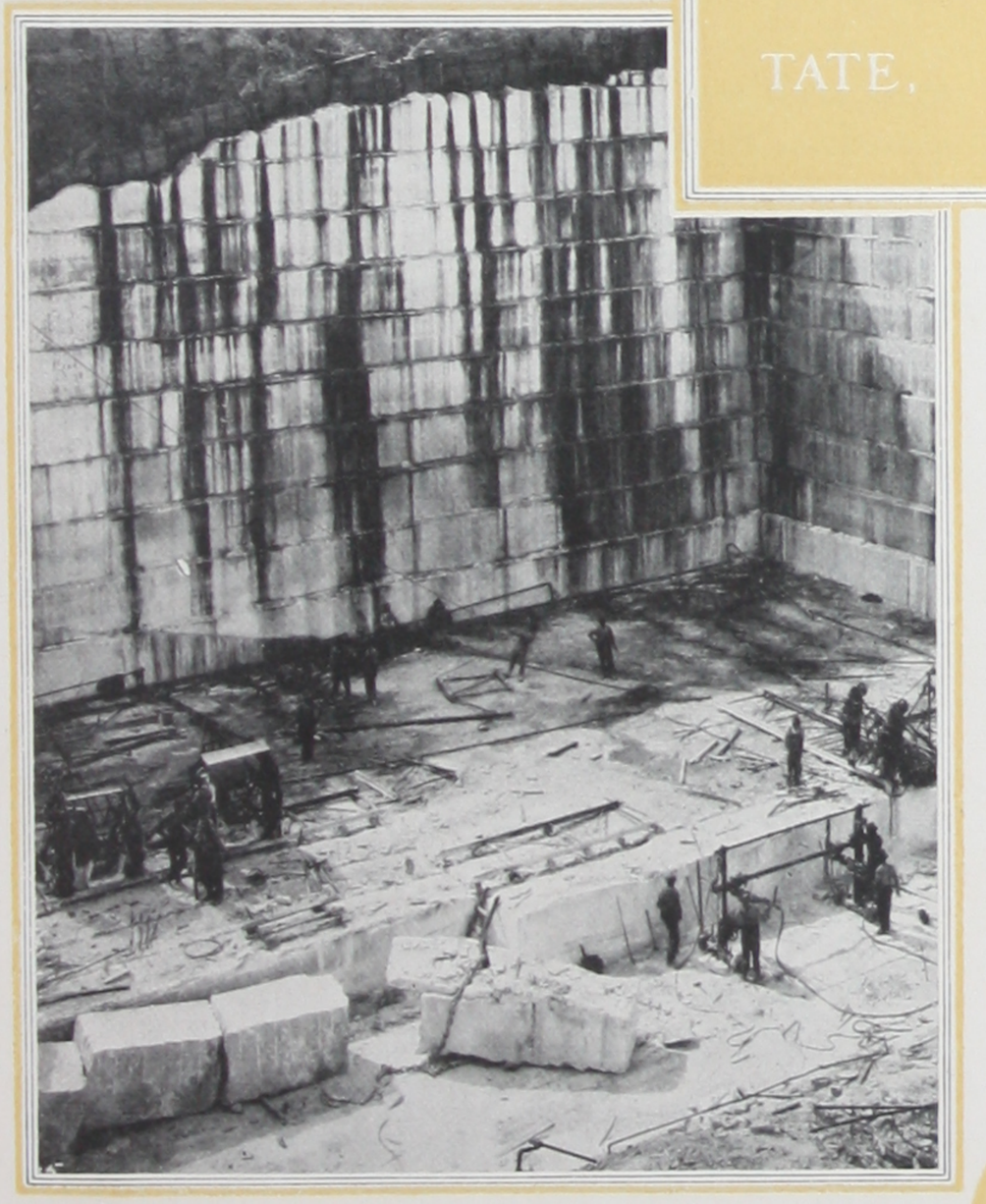


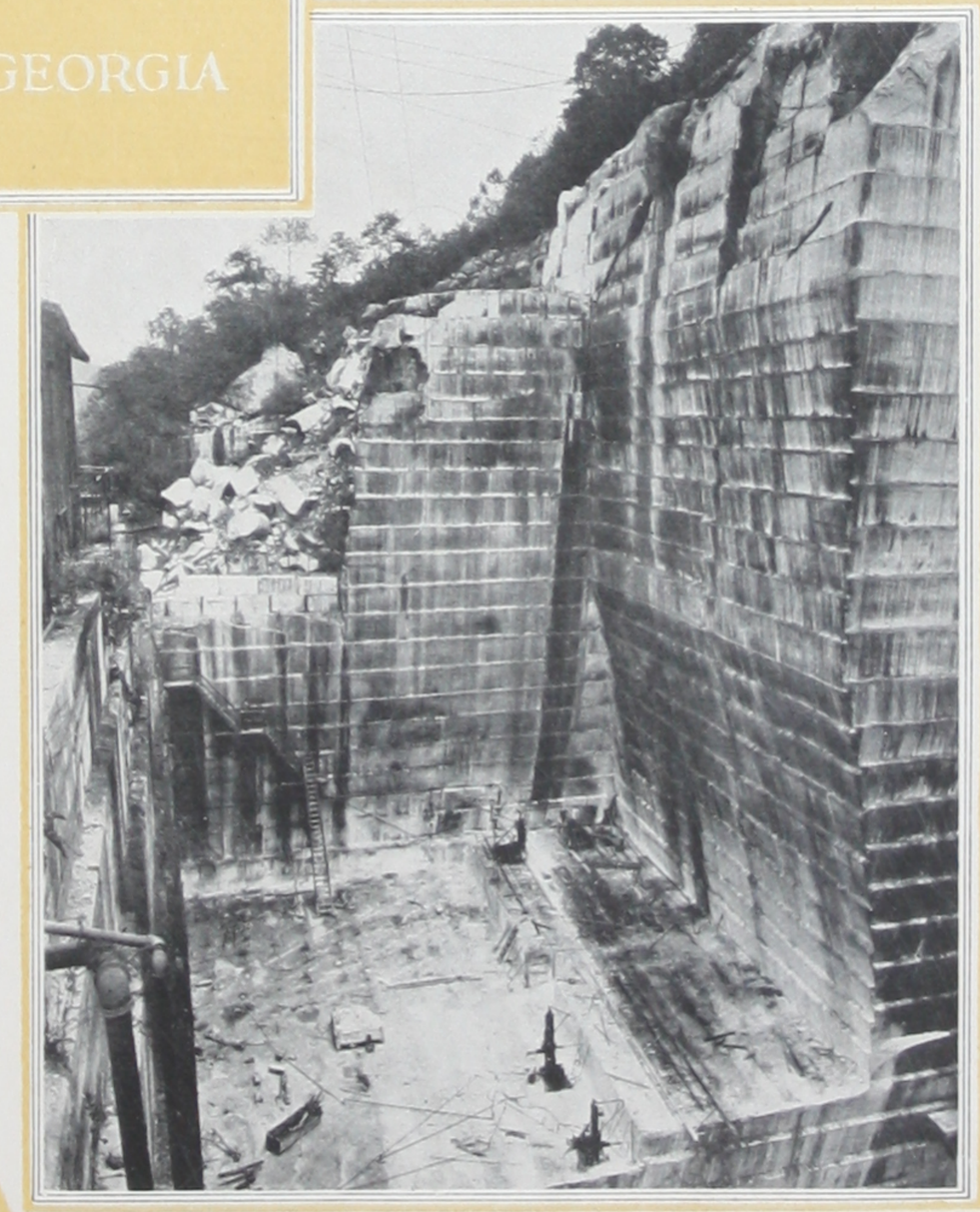


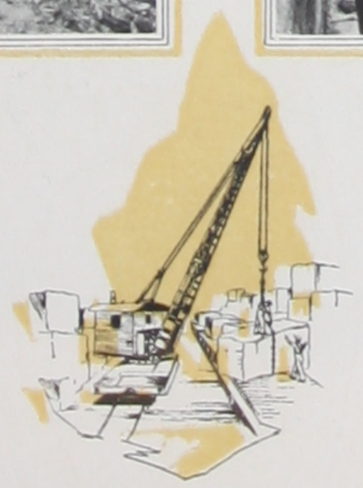


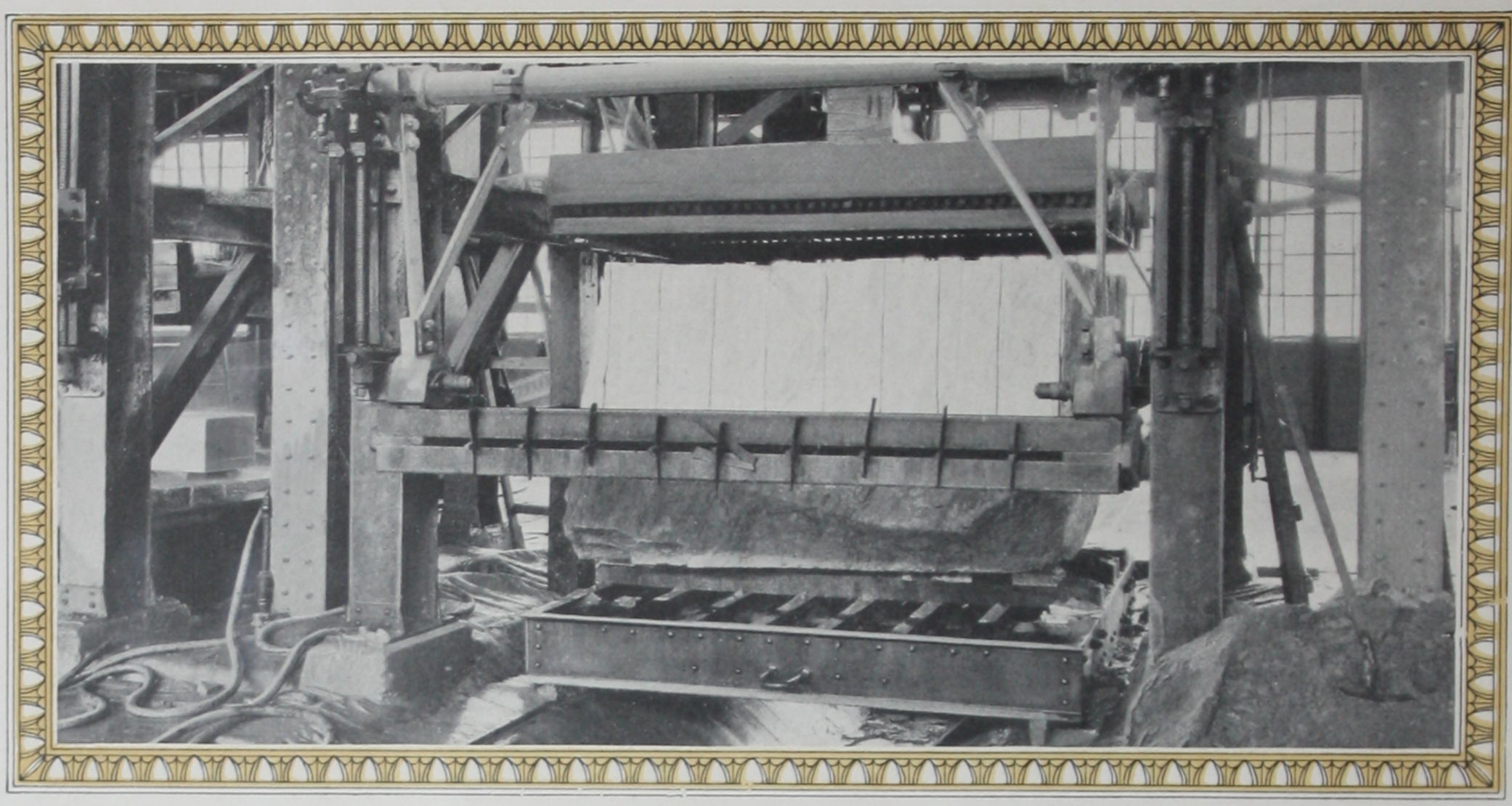
QUARRY VIEWS

TATE, GEORGIA









A SAW THAT HAS NO TEETH, YET SAWS THROUGH ONE OF THE HARDEST OF ALL BUILDING MATERIALS—GEORGIA MARBLE. THIS CLOSEUP VIEW SHOWS THE MARBLE SAW AT WORK. THE BLADES OF THE SAW HAVE CUT HALF WAY THROUGH THE HUGE BLOCK. SAND AND WATER ARE CONSTANTLY FED TO THE SAW BLADES AND THESE BLADES OWE THEIR ABILITY TO CUT TO THE ABRASIVE QUALITIES OF THE SAND.

dimension and finished. Accordingly delivery is greatly expedited. The standard thicknesses carried in stock are $\frac{7}{8}''$, $1''$, $1\frac{1}{4}''$ $1\frac{1}{2}''$, $1\frac{3}{4}''$, $2''$.

The creation of such a large reserve stock as that carried by the Georgia Marble Company insures delivery of carefully matched stock on even the largest jobs. In big buildings this is decidedly important as the entire marble work must present an appearance of color unity and pattern similarity.

The Plants of the Georgia Marble Company

Four modernly equipped manufacturing plants are operated by the Georgia Marble Company; one is at Tate, Georgia; one at Nelson, Georgia; one at Marietta, Georgia, and one at Marble Hill, Georgia.

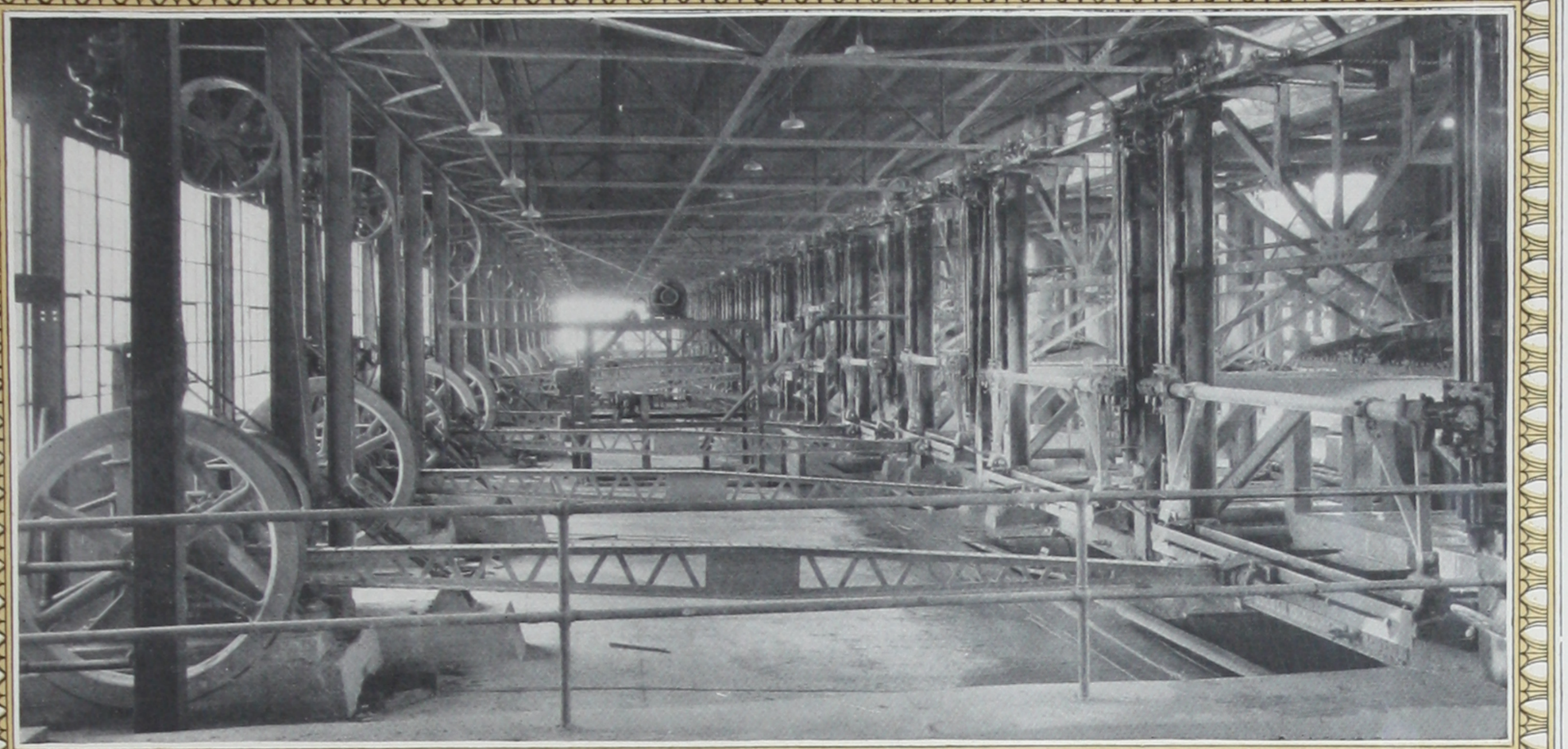
In these plants the marble blocks are sawed, planed, and fabricated into the marble units specified by architects. To understand the manufacturing process let us follow an average architectural job through one of the Georgia Marble Company plants.

Shop Drawings

When first the architects drawings are received for execution they are placed in the hands of the Draughting Department. This department consists of a large group of expert marble draughtsmen. Each man on the staff has been selected because of outstanding ability and no expense has been spared to secure the most skilled, reliable and experienced marble draughtsmen that are available. The function of this department is to convert the architects drawing into cutting and setting plans.

When completed the cutting and setting plans are forwarded to the architect for approval. On their return an individual shop ticket is made for each piece of marble in the entire building. Every unit in the structure is given an individual number which is placed on the shop ticket. The unit carries the same





A BATTERY OF MARBLE SAWS IN ONE OF THE GEORGIA MARBLE COMPANY PLANTS. OVER 100 SUCH SAWS ARE IN OPERATION IN THE PLANTS OF THE COMPANY FOR SIX DAYS A WEEK. THEY NEVER STOP EXCEPT FOR SHORT PERIODS, LONG ENOUGH FOR THE SAWED MARBLE TO BE REMOVED AND NEW ROUGH BLOCKS TO BE PLACED ON THE CARRIAGE FOR SAWING. DAY AND NIGHT THE HUGE ARMS CARRY THE SAW BLADES BACK AND FORTH—BACK AND FORTH.

number on the cutting and setting plans. As each piece of marble is completed it is marked carefully with the number that identifies it and then it is crated and shipped. When the marble reaches its destination the setter has only to look at the number on it and refer to the blue print of the cutting and setting plans furnished him by us in order to know instantly just where the particular piece of marble belongs in the building.

Let us now consider the manufacturing process itself. On the completion of cutting and setting plans these are turned over to the shop foreman for accurate manufacture of the marble required. The blocks selected for the job are carried by huge cranes to the saws.

Sawing the Blocks

The saw blades are adjusted to the proper width, the number of saws used depending on the thickness slabs are to be cut.

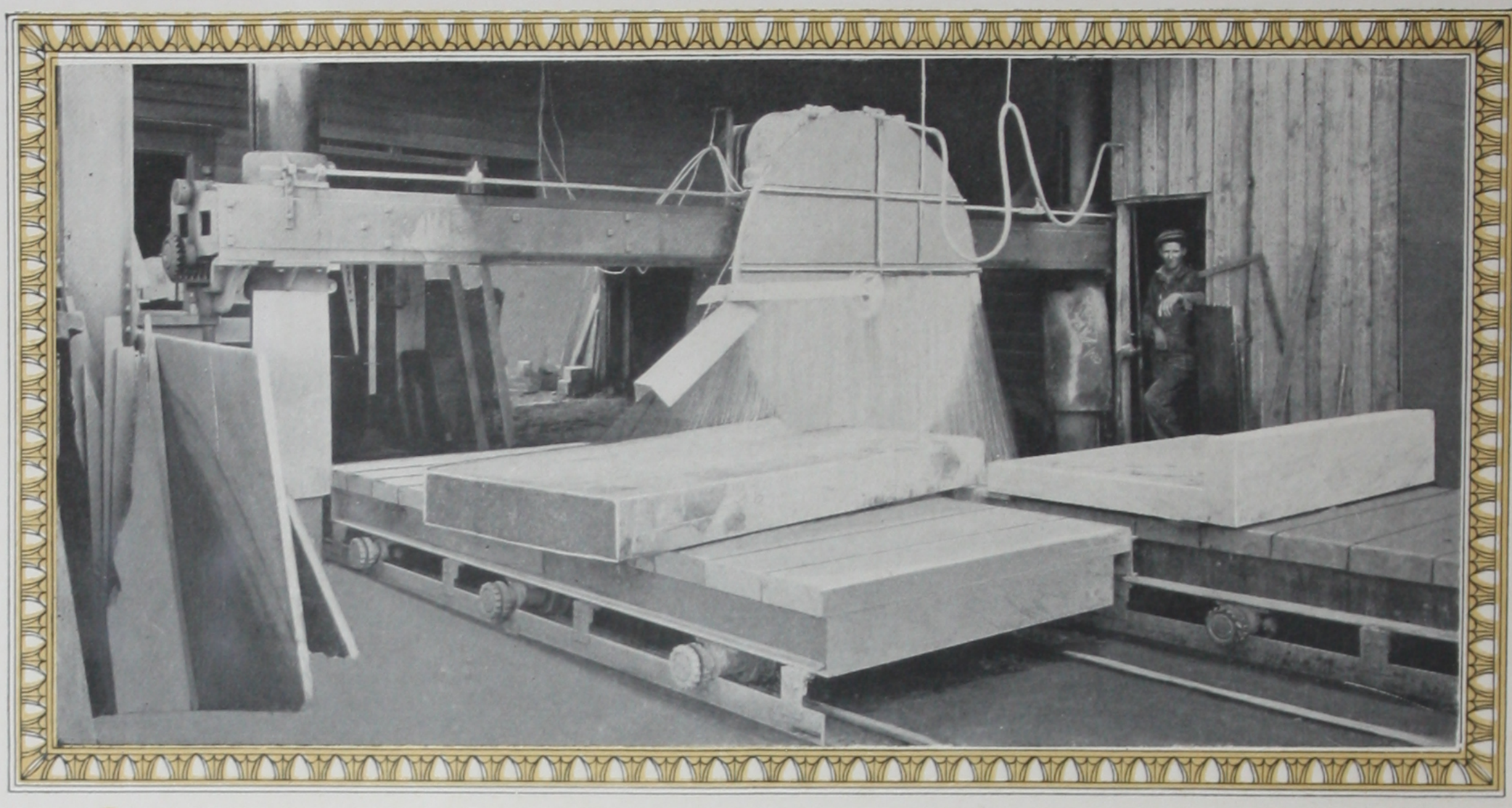
The blades of the marble saw are different from any saw blades you have ever seen. There is not a tooth on them. They are simply long strips of steel that work back and forth across the marble block and owe their ability to cut into the marble to the abrasive properties of sand that is constantly fed to the saws by a stream of water.

The Georgia Marble Company operates more than 100 gang saws which work night and day, six days a week, in the plants of the company.

The Diamond Saws

Slabs of the proper thickness having been delivered by the saws the work of cutting the slabs into desired sizes begins. In the plants of the Georgia Marble Company this is often done by diamond saws. The teeth of the saw are diamonds, as the name indicates. These saws, whirling at a speed of 850 revolutions a minute eat their way through the marble slab in a fashion that makes the slower abrasive saws seem veritable snails of the machinery family.





THE DIAMOND SAW IS USED IN CUTTING SMALL SLABS QUICKLY. REVOLVING AT A SPEED OF 850 REVOLUTIONS A MINUTE THIS SAW ACCOMPLISHES IN A SHORT TIME WHAT THE LARGER SAWS REQUIRE HOURS TO DO. A CONTINUOUS STREAM OF WATER PLAYS ON THE SAW TO KEEP IT FROM BECOMING OVERHEATED THROUGH THE TREMENDOUS FRICTIONAL HEAT DEVELOPED.

Finishing

The marble, having been sawed as near to size as is practical, is now ready for finishing. First, it goes to the rubbing bed—a huge cast iron disk that revolves horizontally about a large shaft. The face of the marble to be rubbed is placed on this disk, and held in position in such fashion that the bed constantly rubs the surface. To add to the abrasive action of the rubbing bed crushed steel is fed to the surface, which, with the water that is used constantly, forms an efficient cutting and abrasive compound. The work of the rubbing bed is carefully gauged by the operator and when the proper dimensions have been obtained the marble is removed.

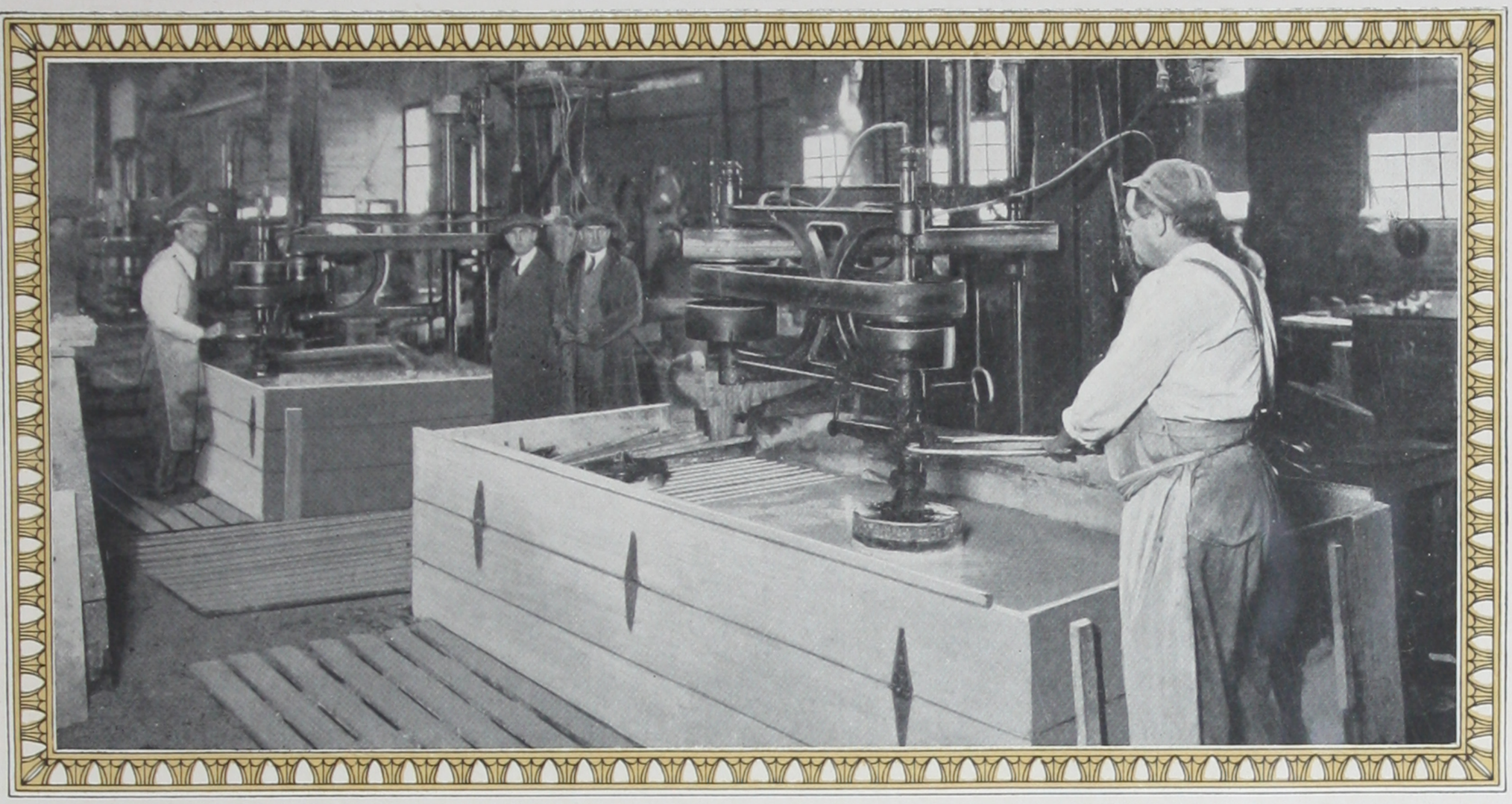
Finishes

Georgia Marble is usually furnished in one of four popular finishes—Polished, Honed, Axed or Bush Hammered. The first two are largely used in interior work, the latter for exterior work. Any other finishes can be furnished special if desired.

To obtain the Axed Finish the marble is taken from the rubbing bed, then a skilled workman, using a chisel driven by a powerful pneumatic power hammer gives to the surface of the marble the rugged and yet beautiful appearance, an idea of which may be obtained by examining the color plates on pages 54 and 58. The Axed Finish may be coarse, medium or fine, depending on the effect desired. The Bush Hammered finish is obtained in much the same fashion, the difference being the tool used by the finisher. In the case of Bush Hammering a tool that has a series of points is used instead of the chisel used in Axed finishing. This tool gives to the marble a rugged pattern, the appearance of which may be seen by referring to color plates on pages 55 and 59.

The Honed Surface is obtained by submitting the marble to a rubbing machine which





FINISHING A PIECE OF GEORGIA MARBLE—THE OPERATOR IS SHOWN WORKING WITH A POLISHING MACHINE. THE HEAD OF THIS MACHINE REVOLVES AT A HIGH RATE OF SPEED. THE WORKMAN DIRECTS ITS REVOLVING FACE BACK AND FORTH ACROSS THE MARBLE UNTIL THE STONE ACQUIRES THE SOFT AND WAX-LIKE HONED FINISH.

is equipped with a gritting head. This revolves at considerable speed, giving to the marble a soft, wax-like beauty. The Polished finish is the highest finish possible and is secured by taking marble that has been honed through a multiple series of additional polishing steps until, in the end, it glistens with a glass-like surface and reveals to the fullest every detail of its beautiful pattern and coloring.

Throughout all of the finishing processes every effort is made to retain and to enhance the natural beauty of Georgia Marble, and only those who have seen its rich coloring and beautiful veining as revealed in some of America's finest buildings can appreciate how well those who finish Georgia Marble execute their work.

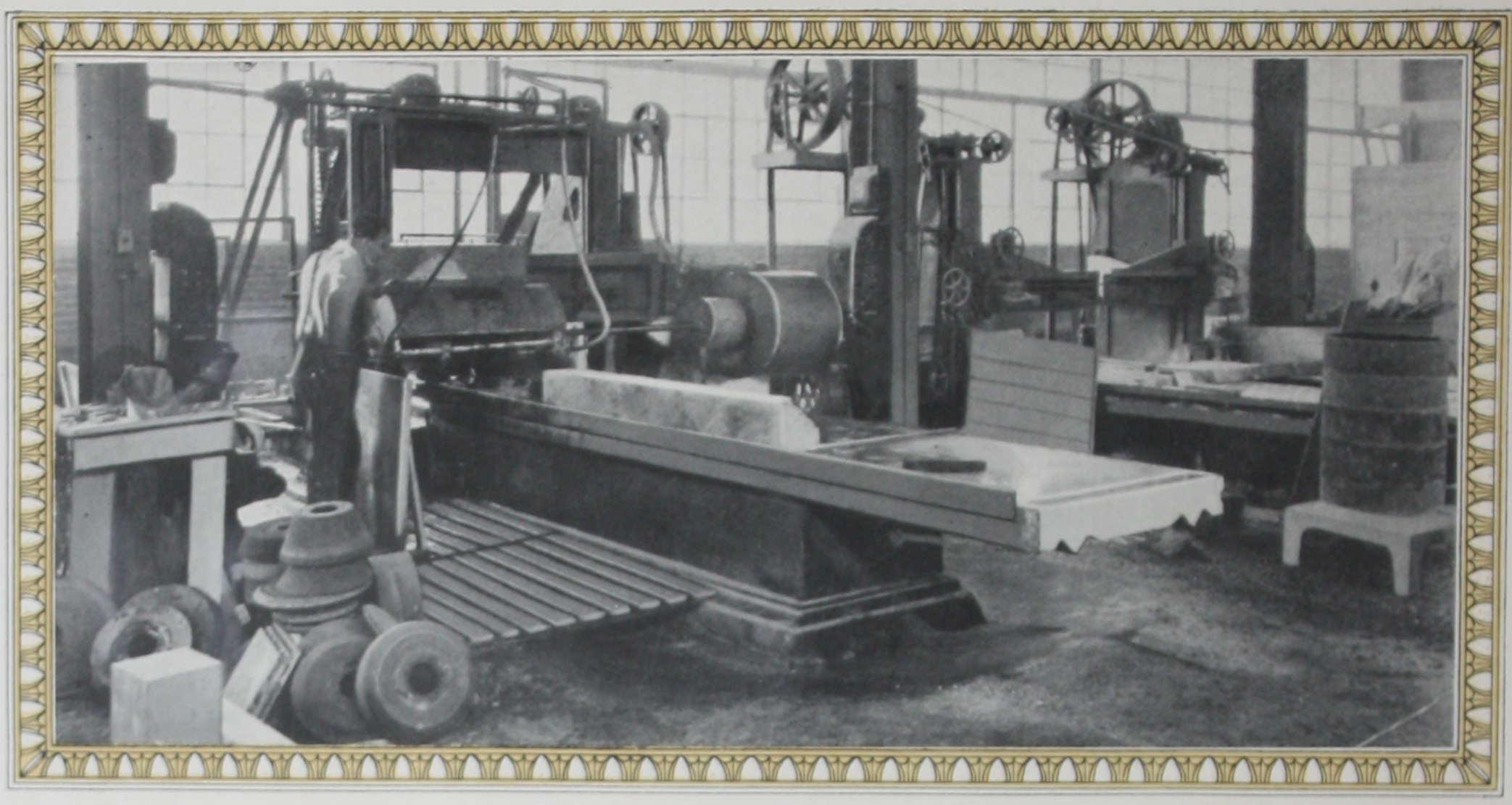
How Curved Surfaces Are Obtained

If all marble work specified was composed of square or rectangular units the processes reported and the equipment described would suffice to produce the units. However, every marble building has many pieces calling for bevels, for fluting and for decorative carving. This type of work demands equipment a great deal more complex than that needed for ordinary types of straight marble work.

For the purpose of manufacturing these pieces the plants of the Georgia Marble Company operate a great number of special machines. Huge lathes, capable of turning columns up to thirty feet by six feet have been installed. Large planers that operate on the same principle as metal planers, cut into the stock, smooth and fashion it according to specifications. Carborundum machines whirl drums of that powerful abrasive at such speed that bevels that were once cut laboriously by hand are cut easily and quickly.

Then, too, there is the sand blast equipment, the great modern aid to decorative carving. The operator of this equipment covers the parts of the design which he wishes to show in low relief with a rubberized substance. This





A CARBORUNDUM MACHINE. THE MARBLE STOCK IS ANCHORED ON A MOVABLE BED. THE BED TRAVELS BACK AND FORTH AND ABRASIVE HEADS OF CARBORUNDUM REVOLVING AT HIGH SPEED CUT THE MOULDINGS IN THE PIECE IN ACCORDANCE WITH THE ARCHITECT'S SPECIFICATIONS. THIS WORK WAS FORMERLY DONE SLOWLY AND LABORIOUSLY BY PLANER AND HAND.

he allows to dry. The parts which are to be recessed are left exposed. Protected by a mask, the sand blast operator turns on the air. Millions of grains of sand are hurled by the machine against the marble surface. Where the marble is covered by the rubberized coating the grains bounce off. Where the unprotected parts are exposed the sand slowly bites into the stone. After a time the surface is worn down to the proper distance, the rubberized protection is scraped off and the design stands out. With a little hand work to add proper details, a beautiful, low relief piece of carving results, at a remarkably low cost.

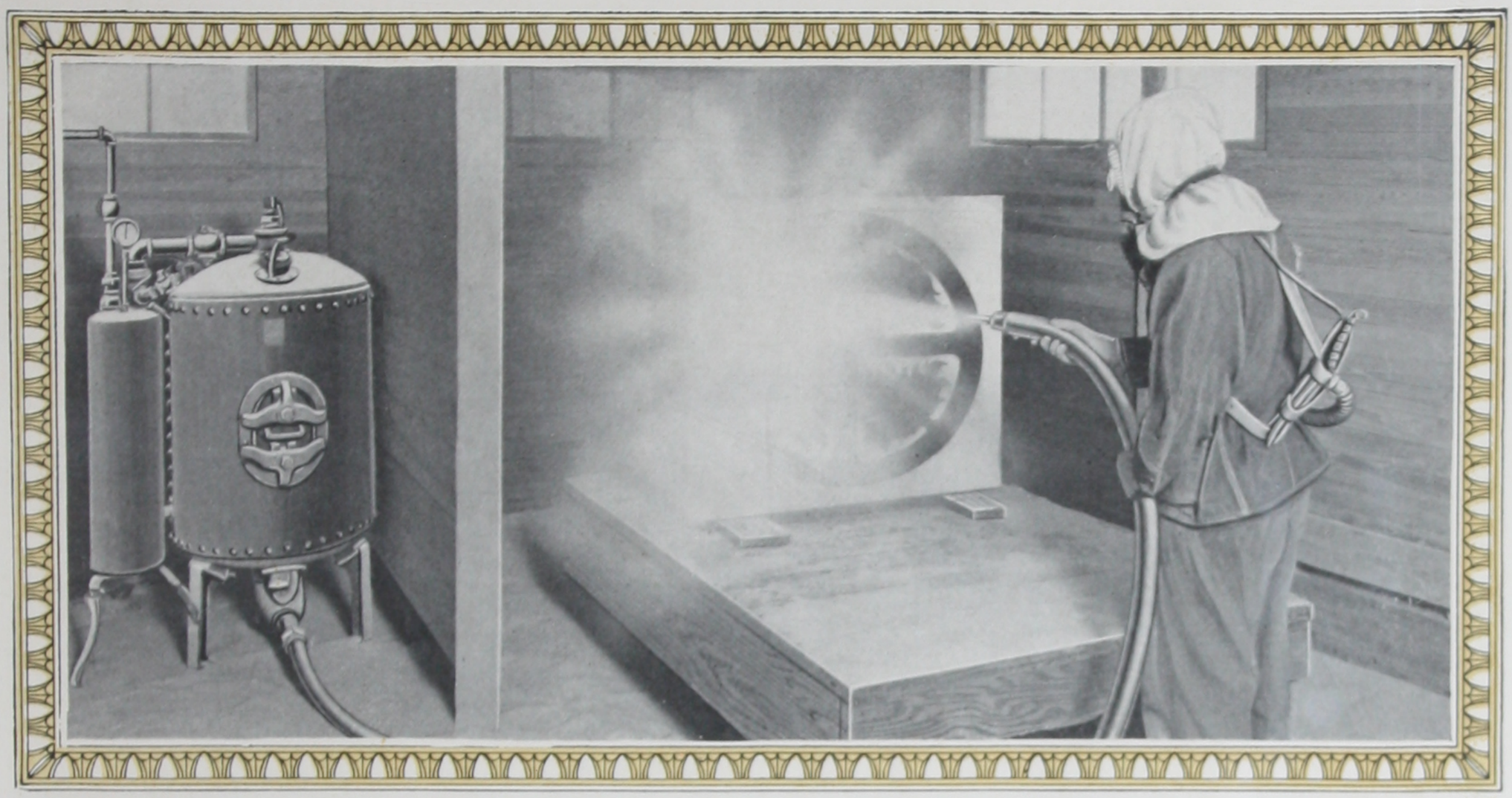
Craftsmanship Still Essential

There are certain types of carving that can never be produced mechanically. The artisans who execute the decorative carving of today work in little different fashion from the men who carved the gargoyles of Notre Dame. It is true that they do have the assistance of pneumatic tools, but in all other essentials they follow the same practices that were known to the medieval sculptor. The decorative fruit designs, the gargoyles, the griffins, the egg and dart borders, and all of the other motifs that embellish and beautify architectural designs must be carved carefully by men who are skilled in their craft and have, in addition, a great deal of the artist in their makeup.

Such men are hard to find. Fortunately, the Georgia Marble Company has an unusually capable and remarkably talented group of carvers. Those architects who have had their most elaborate decorative motifs executed in Georgia Marble can bear witness to this fact.

Some of the carvers now employed by the Georgia Marble Company have worked with us through most of the years of our entire business life (forty years). Many sons have followed in their fathers' footsteps and have learned the stone carver's craft as the sons of medieval guild-masters learned theirs. These men know their work and love their daily tasks as do all artisans who are creators of things beautiful.





THE SAND BLAST AT WORK. COMPRESSED AIR HURLS MILLIONS OF GRAINS OF SAND AGAINST THE MARBLE. WHERE THE DESIGN IS TO SHOW IN RELIEF A RUBBER COVERING PROTECTS THE SURFACE. ELSEWHERE THE SAND CUTS INTO THE STONE. ELABORATE AND BEAUTIFUL DESIGNS ARE PRODUCED AT REMARKABLY LOW COST.

Inspection

Throughout every manufacturing process eagle eyed inspection is given to each piece. Dimensions are constantly checked to insure absolute accuracy. Furthermore, each unit is inspected constantly to insure the soundness of the stock. This work is done by regularly appointed inspectors who are not only marble experts but are also men familiar with the problems of marble setting.

Having passed the final inspection and having been checked for size each Georgia Marble unit is strongly crated for shipment. Soon it becomes part of a huge building where its beauty charms the passerby in the present generation and where throughout the centuries it will present an impregnable surface to the destructive forces of nature.

The Georgia Marble Company Plants at Tate, Nelson, Marble Hill and Marietta, Georgia, are slightly North of Central Georgia. A circle drawn with this section as a center and with a radius of 1,000 miles covers practically all of Eastern, Central, Southeastern, Southwestern and Midwestern United States.

Freight rates are equitable. Through Atlanta, Nashville and Knoxville a number of rail routes offer rapid service to all sections of the country. The ports of Savannah, Jacksonville and New Orleans are nearby and expedite foreign shipments and shipments to points where water rates are advantageous.

Service Offices

For the convenience of architects, Service Offices are maintained at New York, Chicago, and Atlanta, from which points service representatives of the Georgia Marble Company call on the architects of the entire country.

If a representative of the Georgia Marble Company can serve you in any way you may feel sure that he will be pleased to do so whether or not the service has anything to do with marble. On the page following you will find the service offices listed for your convenience.







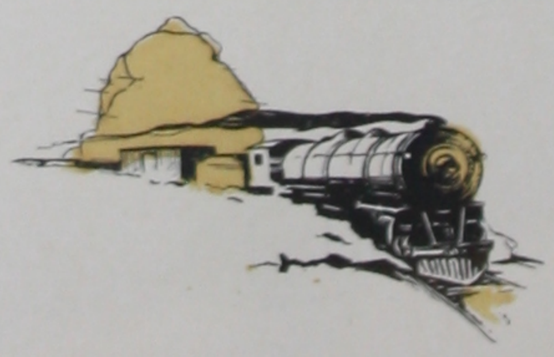
WE GIVE BELOW THE ADDRESSES OF THE THREE SERVICE OFFICES, FOR READY REFERENCE. WE HOPE THAT YOU WILL CALL ON ONE OF THEM IN THE NEAR FUTURE AND GIVE US AN OPPORTUNITY TO BE OF HELP TO YOU.

GEORGIA MARBLE CO.,
MONADNOCK BLDG.,
CHICAGO, ILL.

GEORGIA MARBLE CO.,
MARBRIDGE BLDG.,
NEW YORK, N. Y.

GEORGIA MARBLE CO.,
BONA ALLEN BLDG.,
ATLANTA, GA.





REPORTS

from the

LABORATORIES

GEORGIA *Crystalline* MARBLE *Proves Itself in the Laboratory*

Georgia Marble is composed of an infinite number of crystals that overlap and interlock in much the same fashion as dove-tailed joints. The union between them is practically perfect and without rupture. There are no crevices through which water, moisture, acids or gas may enter to destroy. At the Washington University Testing Laboratory specimens 1/1,000th of an inch in diameter were prepared, mounted on plates and examined through a powerful microscope. With the surface magnified 150 diameters, the structure of the marble was found to be uniform, of a mosaic character, closely amalgamated and entirely of an interlocking crystalline formation. Despite the great magnification no visible openings or crevices could be noted.

The crystalline formation of Georgia Marble not only gives to the material great strength, great moisture and water resistance, but also contributes a high degree of beauty, for the clear crystals have the diamond-like property of reflecting and refracting light.

As a result, in Georgia Marble construction, you find masses of shade and shadow that add a degree of beauty impossible to find in other building materials.

Chemical Purity

The purity of Georgia Crystalline Marble has been proved by many chemical tests. One made by the United States Bureau of Standards is as follows:

	CREOLE
Calcium Carbonate ($CaCo_3$)	97.29
Magnesium Carbonate ($MgCO_3$)	.78
Magnesium Silicate (Mg_2SiO_4)	1.03
Silica (SiO_2)	.48
Alumina (Al_2O_3)	.35
Oxide of Iron (Fe_2O_3)	.04
Moisture	.03

Relative to the purity of Georgia Marble demonstrated by this test, Prof. E. B. Hall, of the Department of Geology, University of Wisconsin, said, "Because of its purity, especially the absence of iron, Georgia Marble will retain its color, and, due to its low absorptive power, agents of disintegration will have little effect."

So much for the chemical contents and the structure of Georgia Marble. We are delighted, of course, to be able to report such purity and such a perfect structural formation. The ability of any building material depends, however, on something other than these properties.

Freedom From Porosity—The Most Important Essential

If you wish a long lasting material look for a material that will not absorb water or moisture. It is because of porosity that building materials are destroyed. Marble, or other stones, that will not permit the ingress of liquids cannot disintegrate or decompose in any climate. The first process in the disintegration of all stone is absorption.

A hint of Georgia Marble's freedom from porosity is given in the report of the microscopic examination which states that under powerful magnification no crevices capable of absorbing water were revealed. Further proof of freedom from porosity is offered by the fact that in the immense deposits of Crystalline Marble in Georgia, in the hundreds of places where projecting points have been exposed to the elements ever since the marble was formed, centuries ago, no decomposed marble can be found; every exposure is free from disintegration and stain. Obviously this marble does not absorb water else it would have many such places. We furnish herewith the results of tests made of the absorption properties of Georgia Marble by the Washington University Testing Laboratory. "To show the non-absorbent properties of Georgia Marble, cubes were dried



at a temperature of 220 degrees Fahrenheit until their weights were constant. The cubes were then placed in water at 60 degrees Fahrenheit and left for twenty-four hours. They were reweighed after this accurate test and each was found to have absorbed less than 6/100th of 1% of moisture. This shows the remarkable non-absorbent properties of the marble. This is the reason why each rain washes the surface of Georgia Marble clean and does not permanently stain or mar its beauty. A test of Georgia Marble against four well-known granites was made to ascertain comparative porosity by the Washington University Testing Laboratory. The results were as follows:

Amount of water absorbed per 100 pounds:

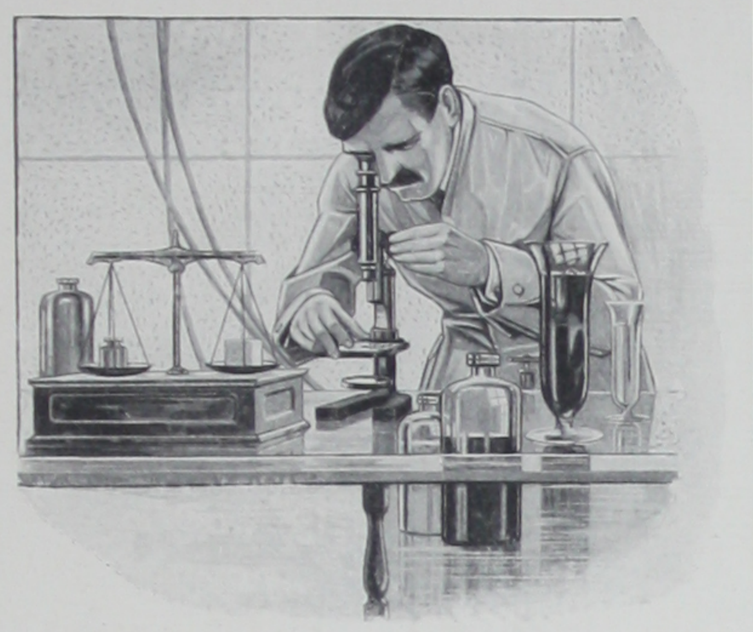
Granite No. 1	0.470
Granite No. 2	0.420
Granite No. 3	0.340
Granite No. 4	0.294
GEORGIA MARBLE	0.028

In this test Georgia Marble proved itself to be 90% less absorptive than the best granite sample examined.

In all, three distinct tests were made by the competent physicists at the Washington University Testing Laboratory and all proved that Georgia Marble is almost non-absorbent. This means, in the opinion of experts, that it is almost indestructible.

Acid Filled City Air Is Destructive

The importance of freedom from porosity cannot be over-estimated. This is especially true where the surface of the stone is exposed. The reason is simple. It has been learned that the smoke-laden air of a city contains small quantities of acid. Rain falling through this acid-bearing atmosphere takes a portion of the acid into solution. Falling on a porous substance this small quantity of acid is carried deep into the material. The acids decompose the stone. Constantly repeated the effect is eventually apparent. The stone disintegrates, as it must. When the acid-bearing water falls on a non-porous material, such as Georgia Marble, it stops at the surface, and destruction is halted before it starts. No moisture, no soot, no gas or acid can enter Georgia Marble. Its interlocking crystals form too compact a structure and its density is everywhere the same.



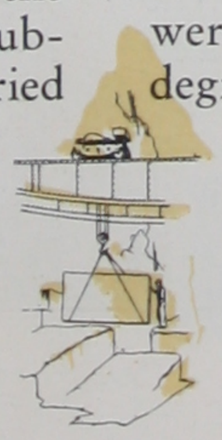
GEORGIA CRYSTALLINE MARBLE HAS BEEN TESTED IN LABORATORIES ALL OVER THE COUNTRY. EVERY TEST HAS SHOWN THE CRYSTALLINE STRUCTURE OF THIS MARBLE TO BE STRONG, NON-POROUS AND HIGHLY INDESTRUCTIBLE

Carbonic Acid Tests

The following reports by George P. Merrill, on the effect of carbonic acid on marbles are taken from the Proceedings of the United States National Museum, volume 49, pages 347-349.

The ultimate aim of the experiments was to ascertain how the stones tested would withstand the effects of an atmosphere and its rainfall made acid through absorbed carbonic acid. The process was as follows:

Two samples of each stone selected were cut into the form of cubes approximately an inch in diameter. The surfaces of each cube were rubbed as smooth as the nature of the material permitted, but no attempt was made to polish. They were then thoroughly washed and dried at 100 degrees C. The cubes were then suspended by threads in a large jar of water kept acid by a stream of carbonic acid from a charged cylinder. The water was changed once each week. Twice during the trial the cubes were withdrawn and while still suspended dried out by artificial heat and again immersed. At the end of three months they were withdrawn, dried at a temperature of 100 degrees, and brushed off with a soft fitch brush



to remove any loosened granules or dust. The appearance of each cube was carefully noted as to color changes, as well as to the manner in which the solvent acted.

Two samples of the White Crystalline Marble submitted to this test lost .011% and .009% by weight, respectively, at the end of a period of seventy days—an average of .010%. Slight roughening but no granulation was noted.

At the end of three months four samples of Georgia Marble treated likewise lost 0.165%, .017%, .015% and .016% by weight, respectively—an average of slightly more than .0161%. At this time the surfaces were slightly roughened but no granulation was noted.

By this test the destructive forces of the worst conditions of a smoke-filled city were multiplied greatly. The reaction of Georgia Marble to the continuous stream of carbonic acid gas proved that the crystalline nature of the material is protection against acid-laden and acid-filled rain water.

Freedom From Stain

Another tremendous advantage of a non-porous material is noted in its cleansing. As proof of the fact that Georgia Marble does not permit the ingress of dirty water we show on page 20 a picture of the Bank of Sheboygan, Sheboygan, Wisconsin. This bank has been constructed more than 17 years. It has withstood the climatic variations which produce frigid cold in winter and great heat in summer. It was never cleaned until the summer of 1926. The picture on page 20 shows the building after cleaning. It looks as though it had just been built. At least that is the opinion of Mr. Adolph Pfister, vice-president of the bank, who says "The building has every appearance of freshly quarried marble."

Only a non-porous material could have resisted the dust and dirt for 17 years. Porous materials would have absorbed dirty water. Stains would have been carried far below the surface. There they could never have been reached by surface cleansing.

Crushing Strength

Numerous tests have been made of the strength of Georgia Marble by submitting samples to crushing tests. One of the most accurate of these was made by the Ordnance Department of the U. S. A., with the following results:

	Crushing Strength Per Square Inch	Per Square Foot
Cherokee Marble	13,900 Lbs.	992 Tons
Etowah (Pink) Marble	13,900 Lbs.	992 Tons
Creole Marble	13,200 Lbs.	943 Tons
Mezzotint Marble	13,100 Lbs.	935 Tons
White Marble	12,500 Lbs.	896 Tons

D. W. Kessler, Assistant Engineer Physicist of the Bureau of Standards in Bulletin 123—"Physical and Chemical Tests on the Commercial Marbles of the United States," issued July 15, 1919, reports a series of compression tests made on Georgia Marble which are most interesting. Twenty-six Georgia Marble samples (dry) were crushed. An average load of 12,865 pounds per square inch was required to break them.

An attempt was then made to break down the marble by freezing and thawing the samples thirty times. After twenty-five samples of Georgia Marble were submitted to this process they were crushed. An average load of 10,533 pounds per square inch was required to break these samples.

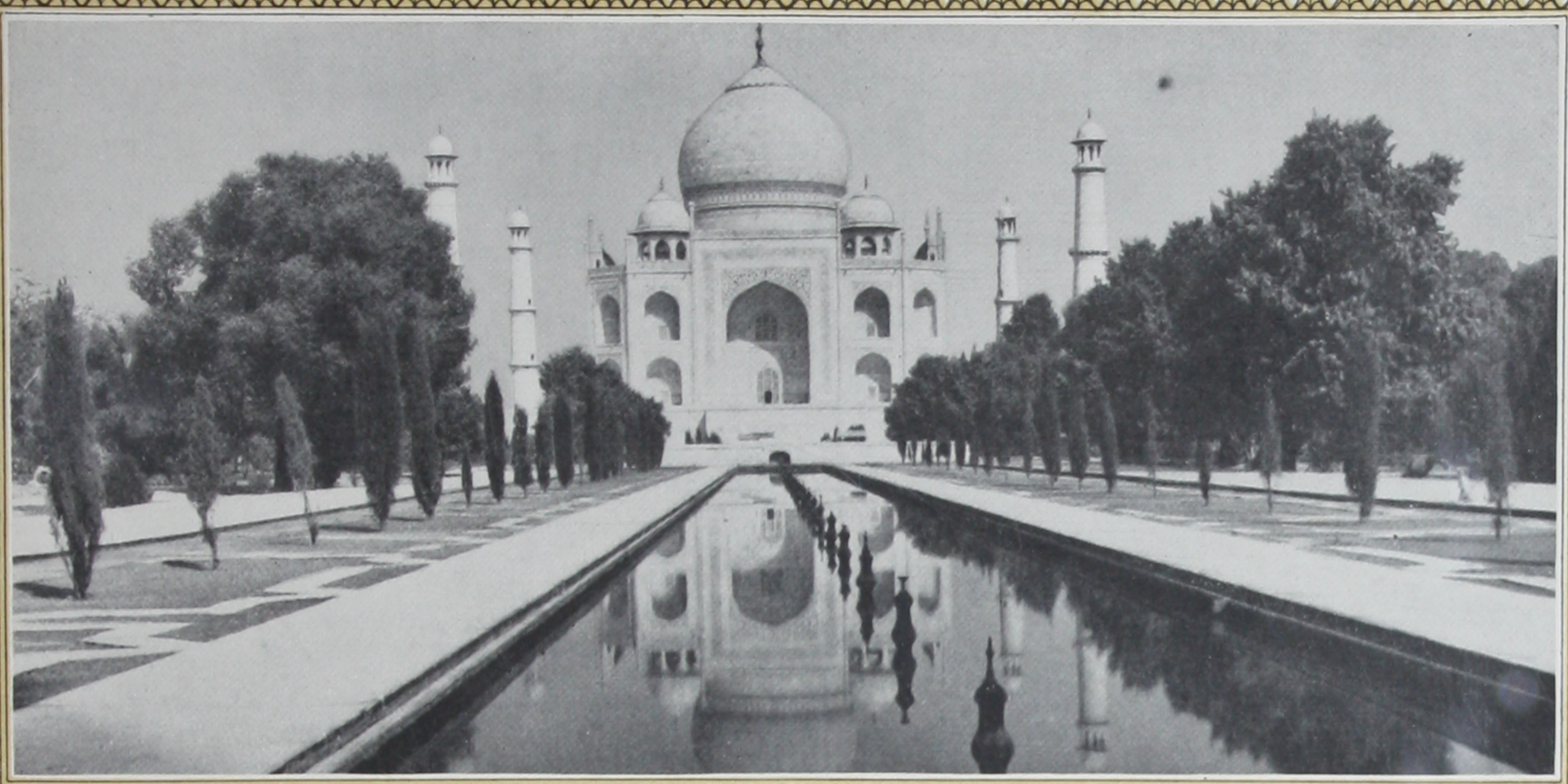
Theoretically, a stone with a compressive strength of 6,000 pounds per square inch, weighing 170 pounds per cubic foot, could be built into a tower over 5,000 feet high before the lower course would fail by crushing. One can see from this statement the tremendous excess strength that Georgia Marble possesses.

Fire Resistance

The results reported by the New York Weekly Underwriter after Fire Tests among building stones show the relative fire resisting properties of commonly used building materials to be as follows:

1—Marble.
2—Limestone.
3—Sandstone or Freestone.
4—Granite.
5—Slate.
6—Conglomerate.





THE TAJ MAHAL—BUILT OF CRYSTALLINE MARBLE WHICH PERFECTLY DUPLICATES THE CRYSTALLINE FORMATION OF GEORGIA MARBLE. SEVENTEEN YEARS WERE SPENT IN ITS CONSTRUCTION. THE MAUSOLEUM IS NOW ALMOST 300 YEARS OLD AND IS IN PERFECT CONDITION DESPITE THE EVER CHANGING CLIMATIC CONDITIONS OF INDIA.

The Test of Time

The findings of chemists, of physicists and of laboratory experts are important, being, as they are, a prophesy of the way in which the material will react to the destructive forces of Nature. Nature herself, however, has submitted marble to more gruelling tests than man can ever invent. Under these tests marble has proved itself to be the longest wearing building material obtainable.

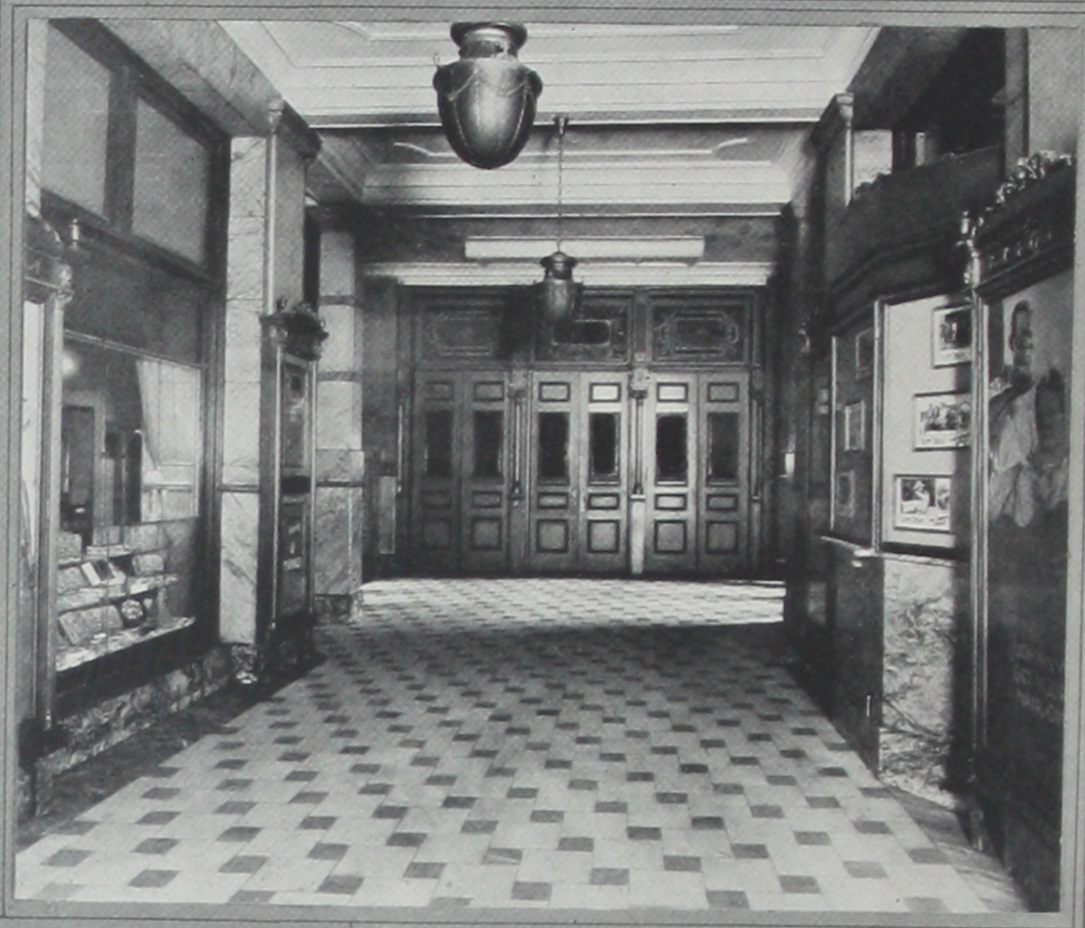
Had the Frieze of the Parthenon been constructed of some material other than marble it is probable that the Elgin Marbles would not be on exhibit today in the British Museum. Had the Greeks carved in materials other than marble how well would their statues have withstood the punishment of twenty-five centuries?

The greatest of the ancient sculptors, Phidias and Praxiteles, executed their masterpieces in marble. It has brought down to us the deathless beauties from the later chisel of Michelangelo. The exquisite Venus de Medici was cut in marble.

It is interesting to note that the ancients chose for their masterpieces types of marble greatly resembling Georgia Marble in formation. Before the fifth century Parian Marble, imported by the Greeks from the Island of Paros, was largely used. This marble was of crystalline formation and examination of ancient works shows that it has a most remarkable resemblance to Georgia Marble. Pentelican Marble, used by the Greeks at a later date is another marble of the same type. Together, these are the world's three most durable marbles. Today Georgia Marble is the only one of the three in general use.

The scores of actual demonstrations of the long wearing qualities of Georgia Marble should be carefully considered by the architect. When they are weighed in conjunction with the remarkable results of laboratory tests they show that Georgia Marble is undoubtedly one of the longest wearing stones, if not the ONE longest wearing, building stone obtainable.





LOBBY OF
GRAND THEATER,
ATLANTA, GEORGIA
UNHARMED
BY THE TRAMP
OF 200,000,000
FEET



BANK OF
SHEBOYGAN, WIS.,
UNSTAINED
AND FRESH
AFTER 17 YEARS
OF SERVICE

UPPER PHOTOGRAPH—Floor of Grand Theatre Lobby, Atlanta, Georgia. Georgia Marble Floor Tile has been in service for more than thirty years. Approximately two hundred million feet have walked upon it. It is almost as fresh today as when first laid.

LOWER PHOTOGRAPH—Bank of Sheboygan, Sheboygan, Wisconsin. The Georgia Marble in this bank has been forced to withstand the severe climatic changes that Wisconsin weather affords. When cleaned recently the marble showed no deterioration whatever and presented the appearance of freshly quarried stone after 17 years of service.



DETAILS
of
PROMINENT
GEORGIA MARBLE STUDIES
(With Photographs)

FLAGGING—DOORWAYS
MANTELS

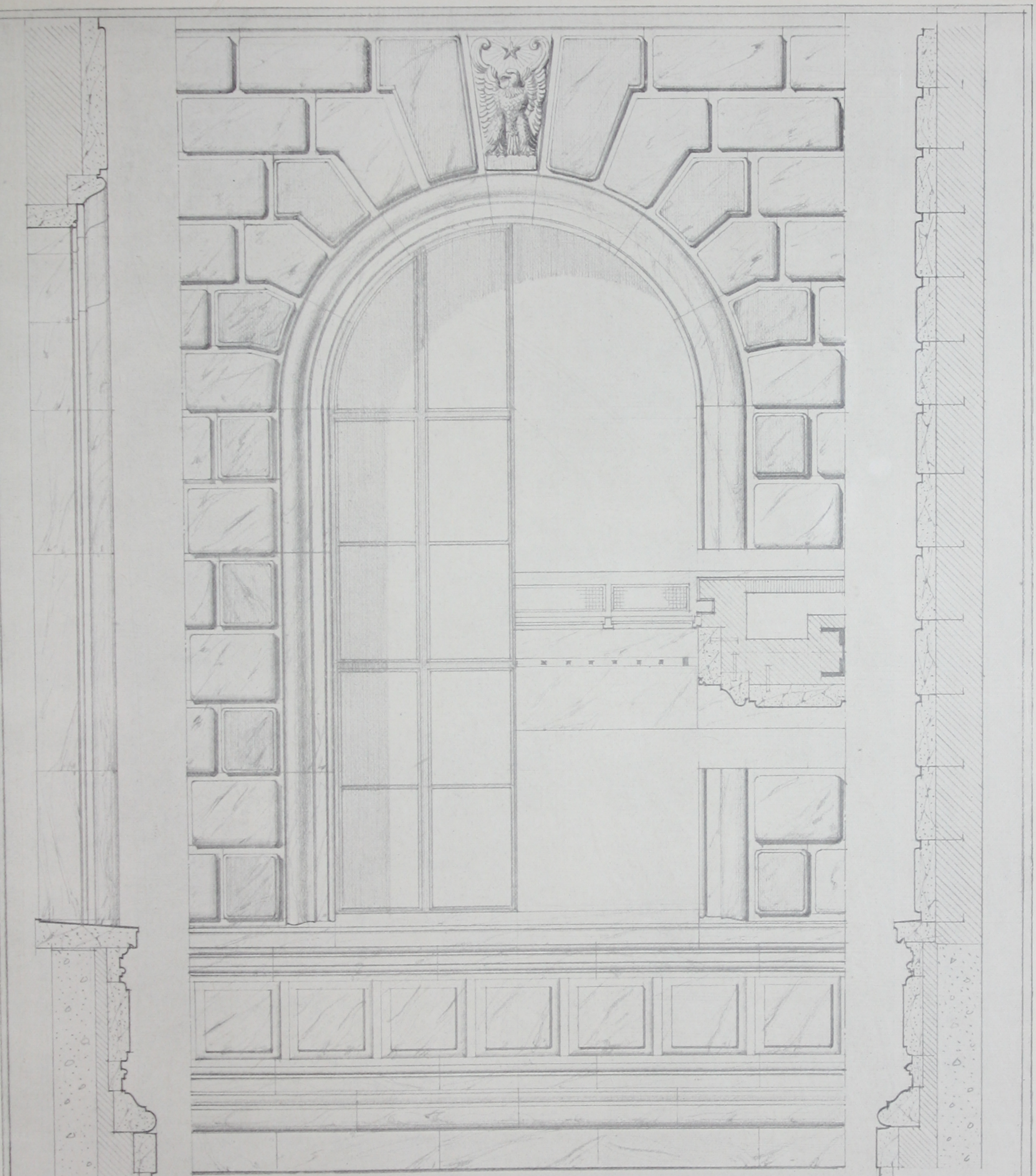
STANDARD
SPECIFICATIONS



FEDERAL RESERVE BANK — CLEVELAND, OHIO
WALKER & WEEKS ARCHITECTS



TYPICAL BAYS
FEDERAL RESERVE BANK



FEDERAL RESERVE BANK
CLEVELAND - OHIO
WALKER & WEEKS - ARCHITECTS

J. Moscowitz. Del.

PLATE
NO. I
scale
0 1' 2' 3'

THE GEORGIA MARBLE COMPANY
TATE, GEORGIA

NEW YORK
1328 Broadway

ATLANTA
Bona Allen Building

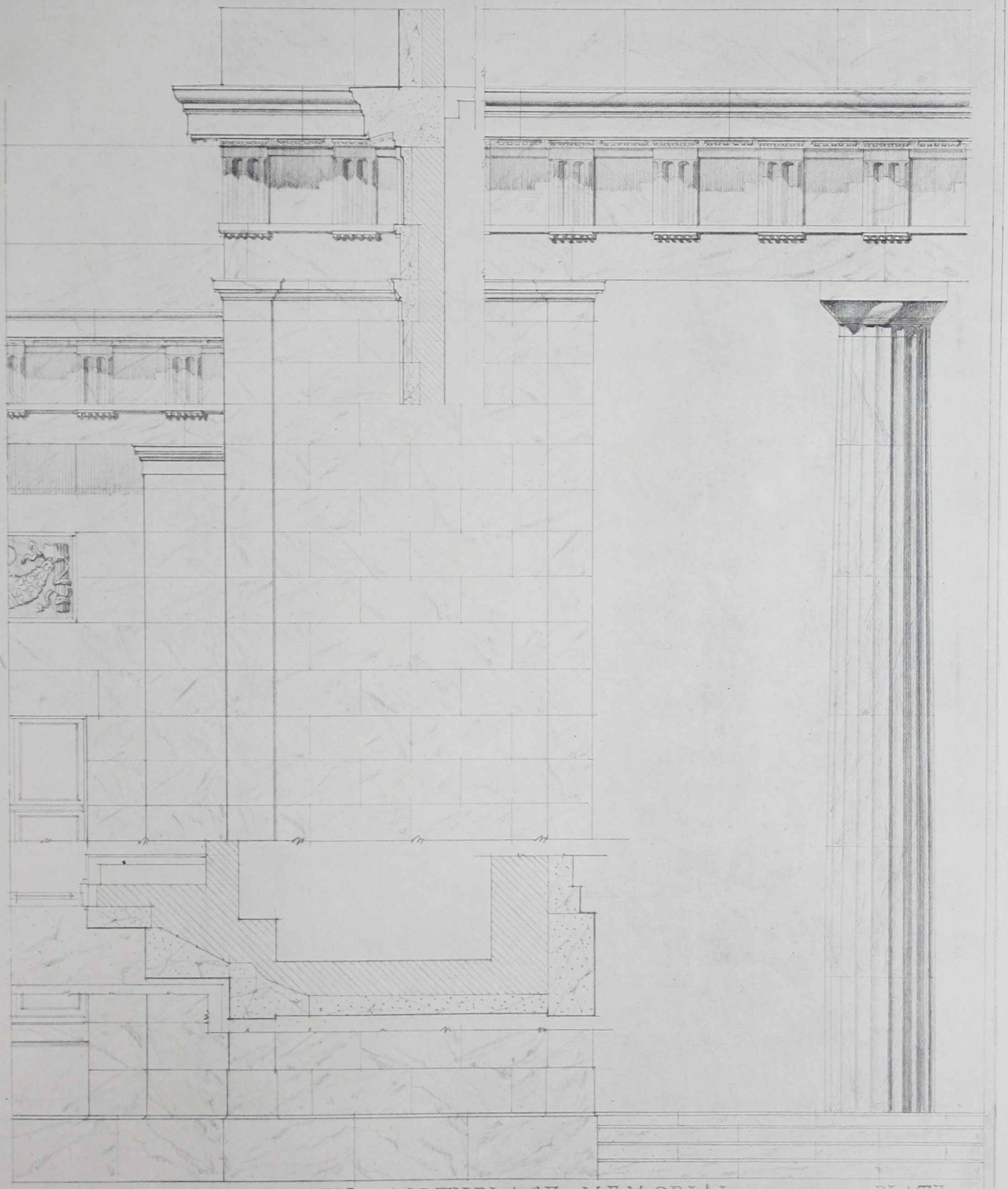
CHICAGO
456 Monadnock Bldg.



McKINLEY STATUE ~ NILES, OHIO
J. MASSEY RHIND SCULPTOR



McKINLEY BIRTHPLACE MEMORIAL ~ NILES, OHIO
McKIM, MEAD AND WHITE ~ ~ ~ ~ ARCHITECTS



McKINLEY BIRTHPLACE MEMORIAL
NILES - OHIO
McKIM, MEAD AND WHITE - ARCHITECTS.

I. MOSCOWITZ. DEL.

PLATE NO. II
scale

THE GEORGIA MARBLE COMPANY
TATE, GEORGIA

NEW YORK
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ATLANTA
Bona Allen Building

CHICAGO
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RINGLING RESIDENCE ~ SARASOTA, FLORIDA
CLAS SHEPHERD & CLAS ARCHITECTS



ENTRANCE ~
RINGLING RESIDENCE ~

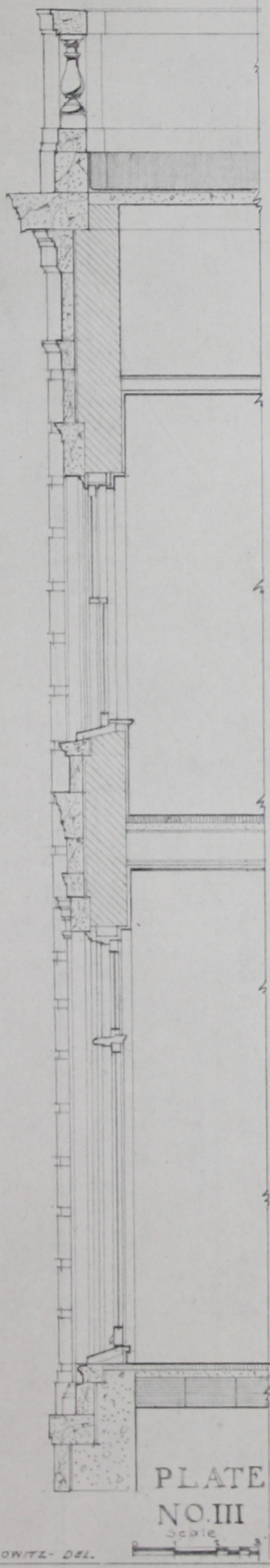




PLATE
NO. III
Scale

I. MOSCOWITZ - DEL.

RINGLING RESIDENCE
SARASOTA - FLORIDA
CLAS, SHEPHERD & CLAS- ARCHITECTS

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NEW YORK
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ATLANTA
Bona Allen Building

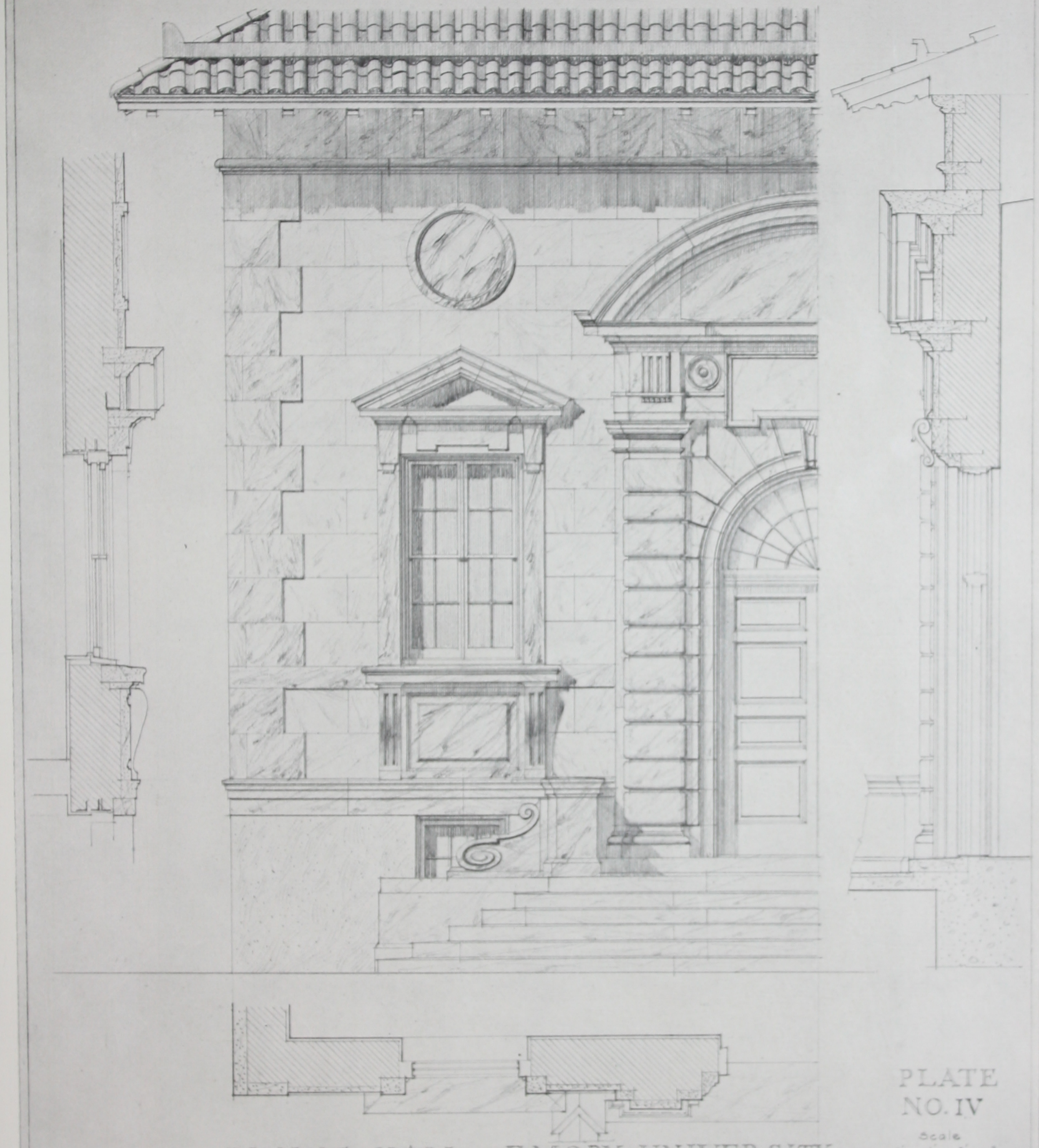
CHICAGO
456 Monadnock Bldg.



EMORY UNIVERSITY DINING HALL - ATLANTA, GEORGIA
IVEY AND CROOK ARCHITECTS



ENTRANCE-
EMORY UNIVERSITY DINING HALL



DINING HALL - EMORY UNIVERSITY

ATLANTA - GA

IVEY & CROOK - ARCHITECTS

PLATE NO. IV

Scale

I. MOSCOWITZ. DELINEATOR

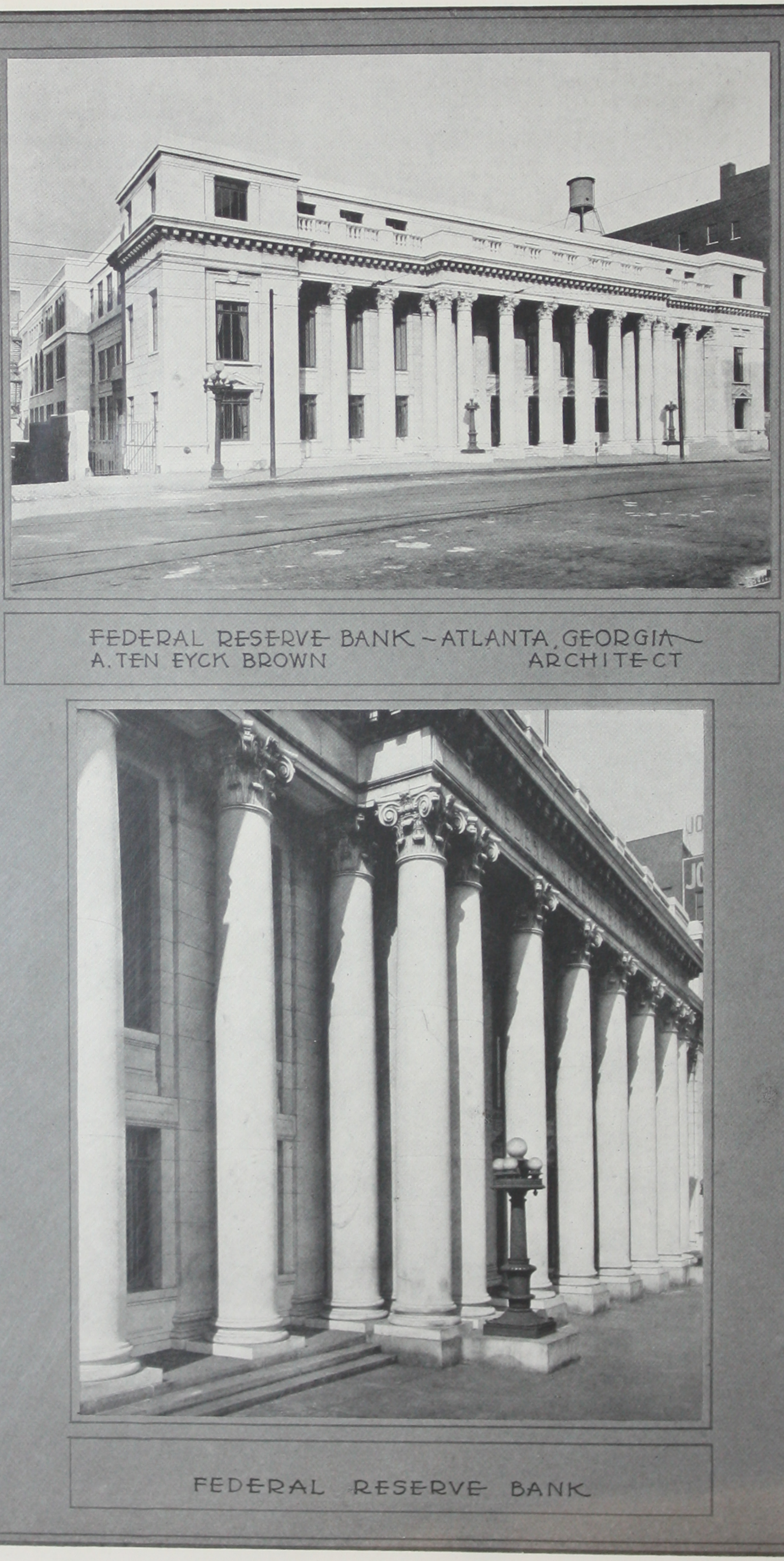
THE GEORGIA MARBLE COMPANY

TATE, GEORGIA

NEW YORK
1328 Broadway

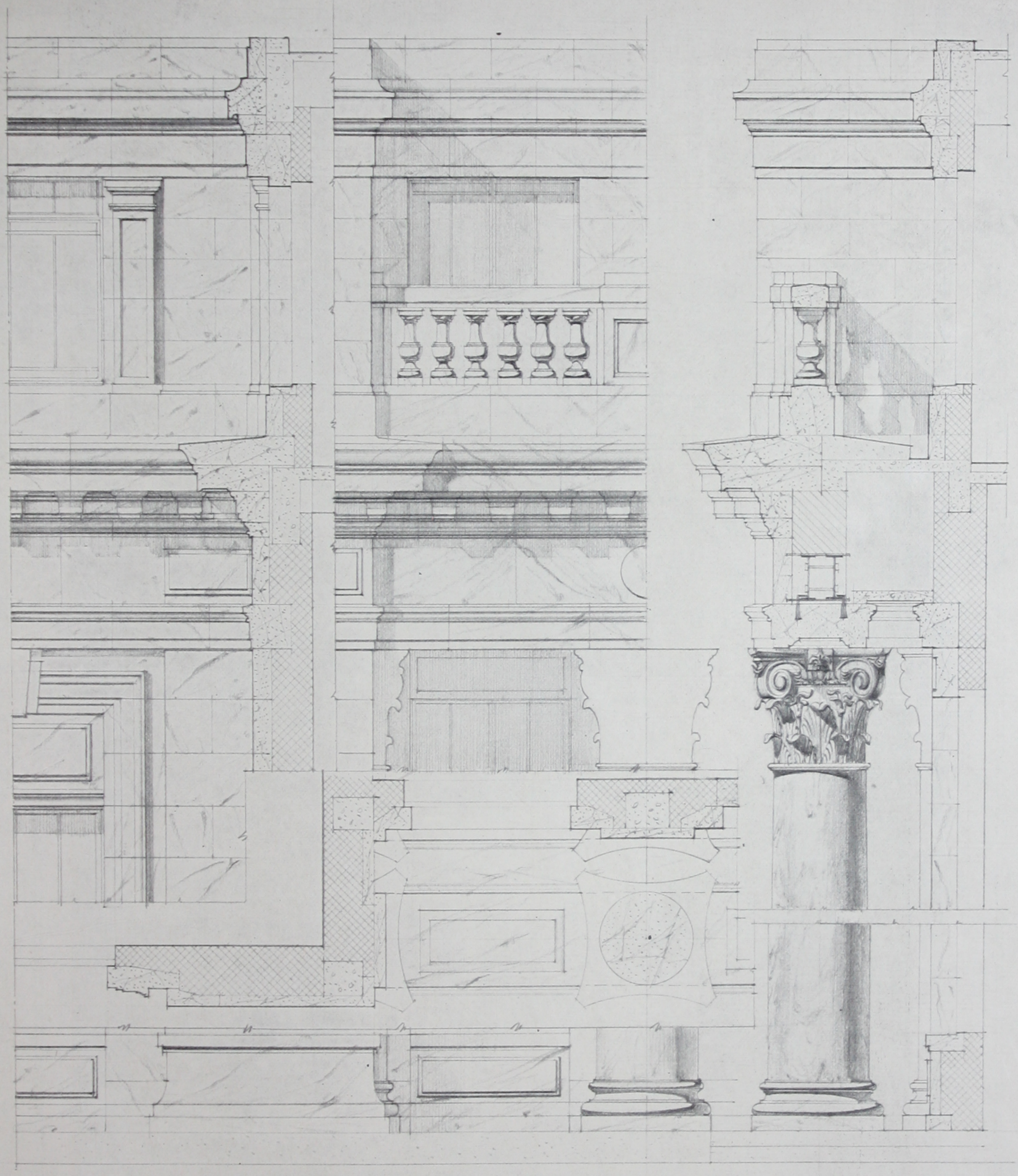
ATLANTA
Bona Allen Building

CHICAGO
456 Monadnock Bldg.



FEDERAL RESERVE BANK - ATLANTA, GEORGIA
A. TEN EYCK BROWN ARCHITECT

FEDERAL RESERVE BANK



FEDERAL RESERVE BANK OF ATLANTA
A. TEN EYCK BROWN - ARCHITECT.

PLATE NO. V.
Scale

J. MOSCOWITZ. DEL.

THE GEORGIA MARBLE COMPANY
TATE, GEORGIA

NEW YORK
1328 Broadway

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Bona Allen Building

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456 Monadnock Bldg.



J. A. TROWBRIDGE ~ RESIDENCE ~ ~ NOROTON ~ CONN.
ELECTUS D. LITCHFIELD & ROGERS ARCHITECTS



BALUSTRADE DETAIL
J. A. TROWBRIDGE RESIDENCE

J. A. TROWBRIDGE - RESIDENCE

NOROTON - CONN.

ELECTUS D. LITCHFIELD & ROGERS - ARCHITECTS

PLATE NO. VI.

Scale

T. MOSCOWITZ DEL.

THE GEORGIA MARBLE COMPANY

TATE, GEORGIA

NEW YORK
1328 Broadway

ATLANTA
Bona Allen Building

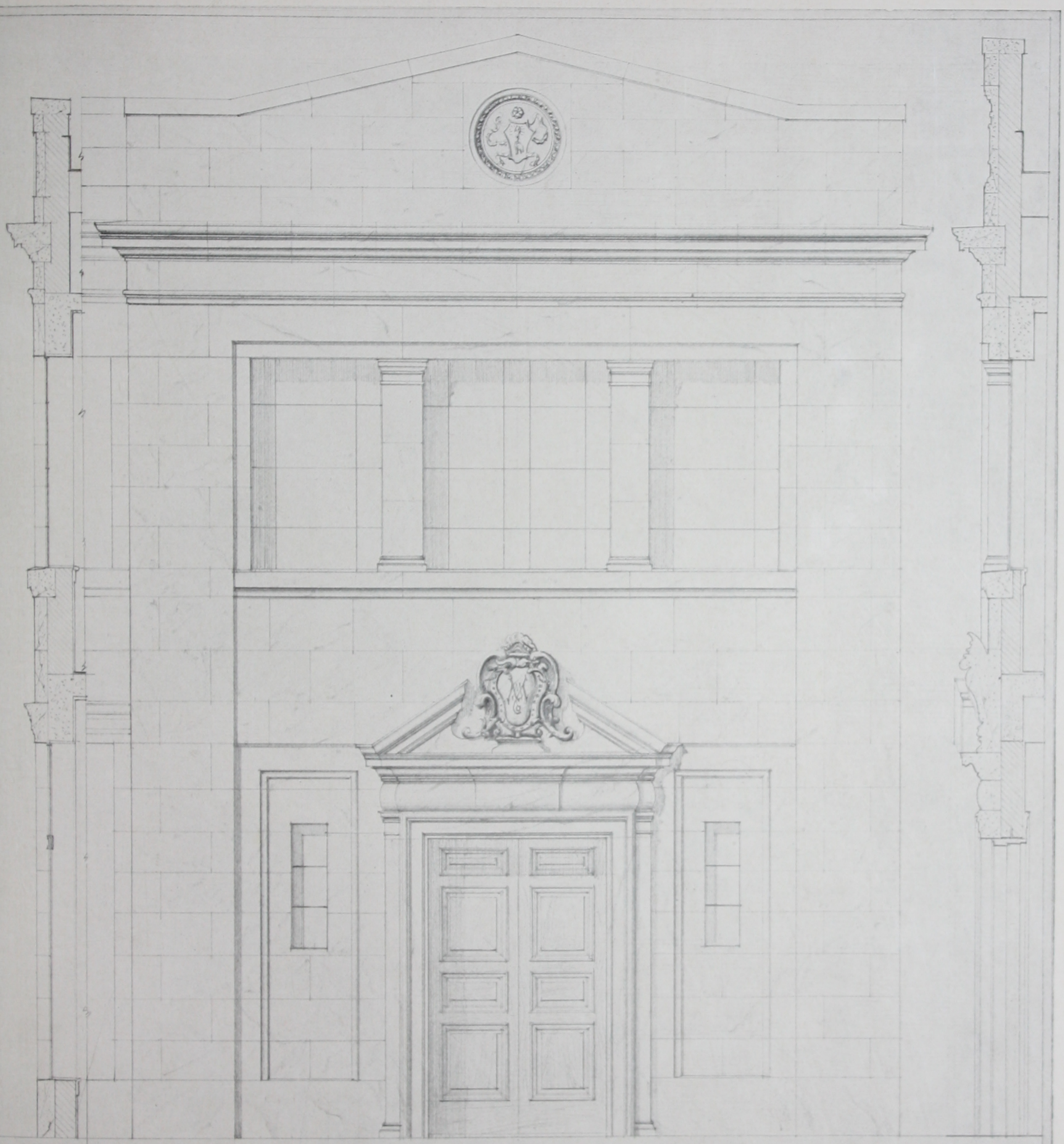
CHICAGO
456 Monadnock Bldg.



ENTRANCE DETAIL
MACMILLAN BUILDING~



MACMILLAN BUILDING~ ATLANTA, GEORGIA
R. KENNON PERRY ARCHITECT



THE MACMILLAN BUILDING
ATLANTA GA.
R. KENNON PERRY - ARCHITECT

PLATE
NO. VII
Scale

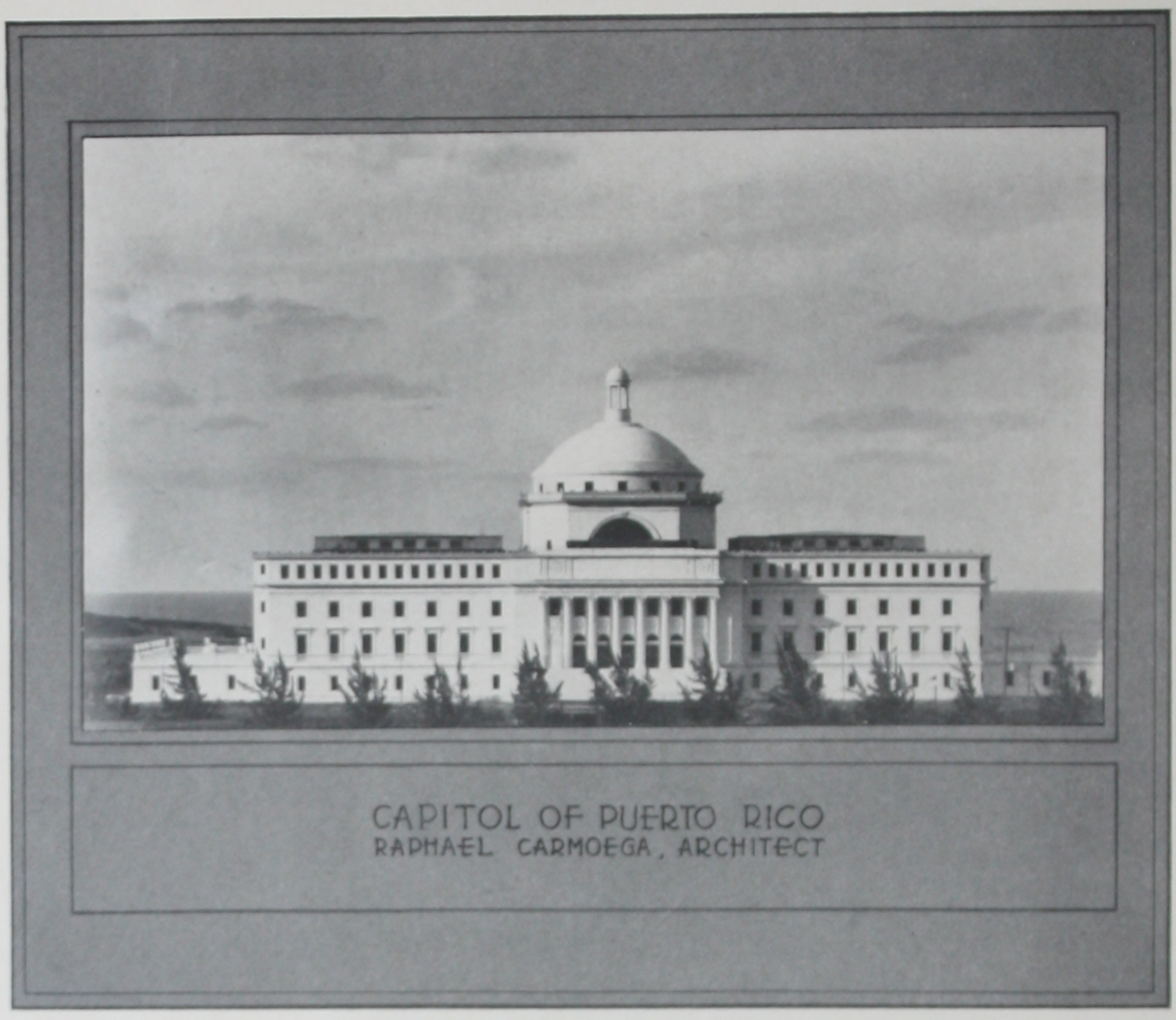
I. MOSCOWITZ DEL.

THE GEORGIA MARBLE COMPANY
TATE, GEORGIA

NEW YORK
1328 Broadway

ATLANTA
Bona Allen Building

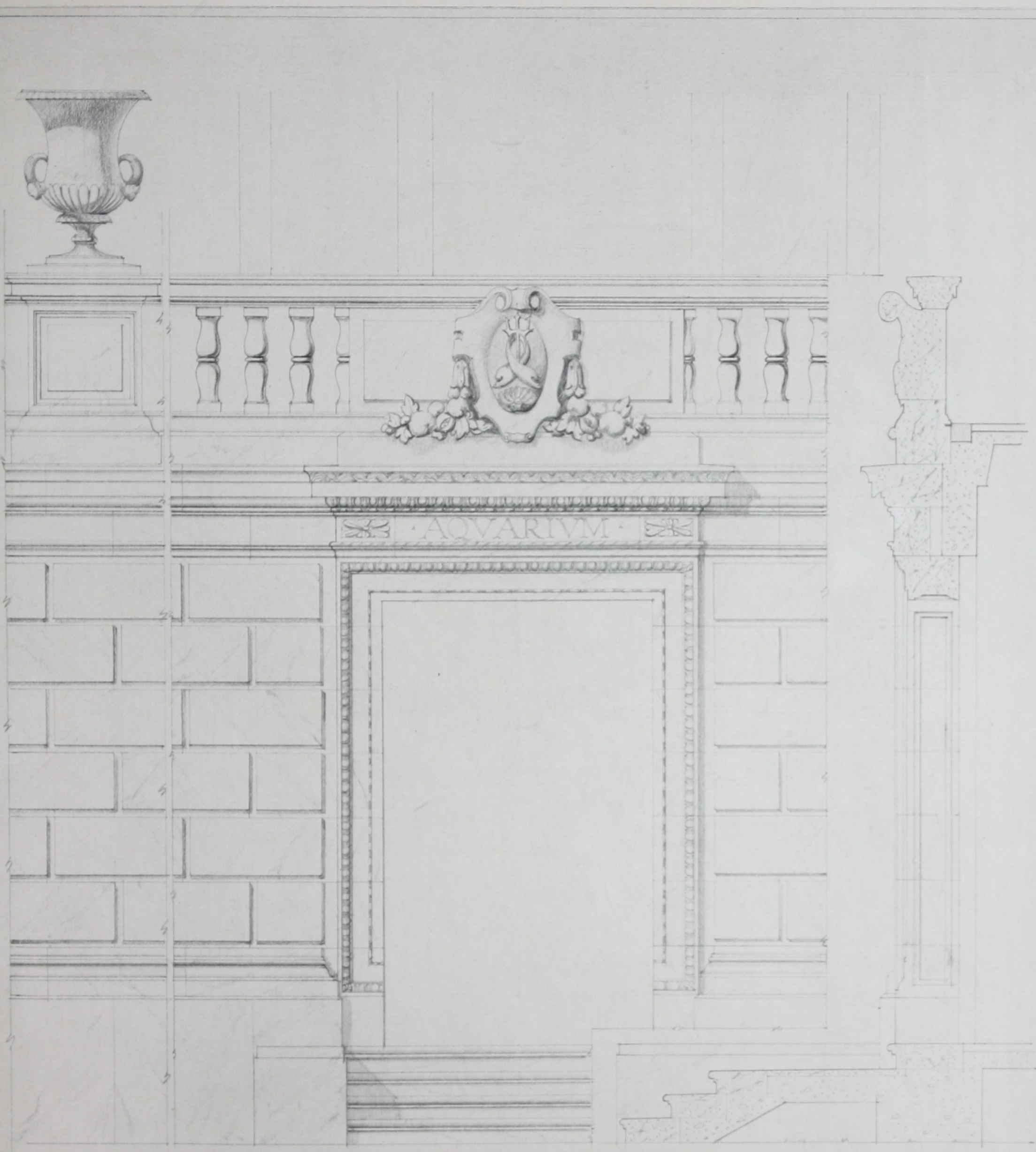
CHICAGO
456 Monadnock Bldg.



CAPITOL OF PUERTO RICO
RAPHAEL CARMOEGA, ARCHITECT

The exterior of this building from grade to top of lantern is of White Georgia Marble. All of this marble was cut to exact size, carved ready to set, and delivered to the building site in San Juan in less than twelve months after the work was started. Two hundred cars of marble were shipped to Jacksonville, Florida, by rail and transported from there by chartered steamer in three shiploads. This was done without interfering with other work carried on at the same time.

The company's own expert setters handled the erection of this work to final completion with the result that the contractor, when the work was finished, had this to say: " . . . . I must thank you for the pleasant relations which we have had and I cannot but express my admiration for the way your superintendent handled the job and overcame all obstacles in his way, in the most workmanlike and gentlemanly manner." This is typical of the service rendered by this organization.



CAPITOL OF PVERTO RICO

RAPHAEL CARMOEGA ARCHITECT

PLATE NO. VIII

Scale 0 1 2 3

I. MOSCOWITZ. DEL.

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Bona Allen Building

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456 Monadnock Bldg.



CLEVELAND PUBLIC LIBRARY- CLEVELAND, OHIO
WALKER AND WEEKS ARCHITECTS



DECORATIVE DETAIL
CLEVELAND PUBLIC LIBRARY

CLEVELAND PVBLIC LIBRARY
WALKER AND WEEKS – ARCHITECTS

PLATE
NO. IX

Scale

I. MOSCOWITZ DEL.

THE GEORGIA MARBLE COMPANY
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NEW YORK
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Bona Allen Building

CHICAGO
456 Monadnock Bldg.



POST OFFICE ~ AUGUSTA, GEORGIA
O. WENDEROTH ~ ARCHITECT



TYPICAL BAYS
AUGUSTA POST OFFICE

AVGVSTA POST OFFICE

O. WENDEROTH — ARCHITECT

PLATE NO. X.

Scale:

I. Moscowitz. Del.

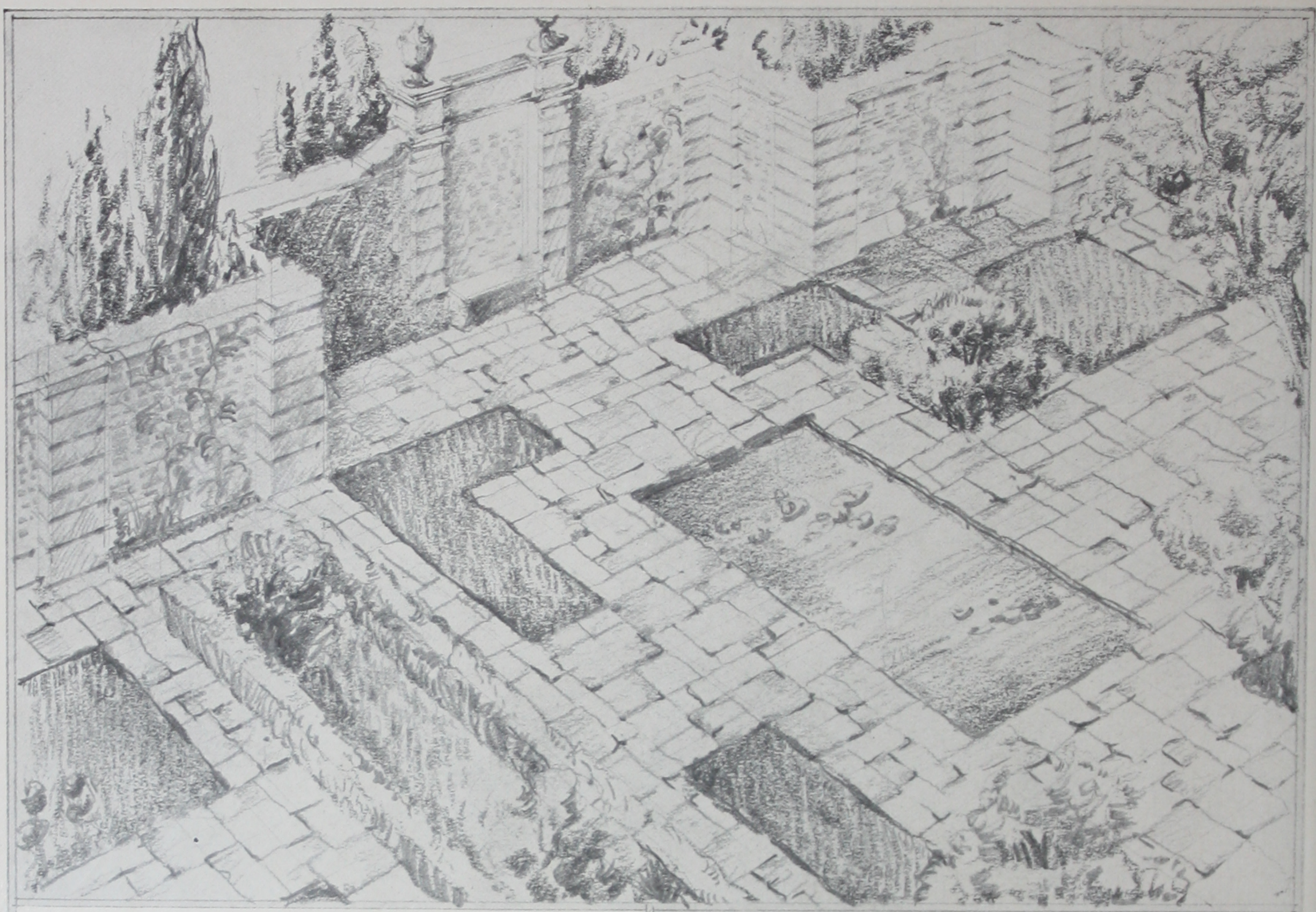
THE GEORGIA MARBLE COMPANY

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NEW YORK
1328 Broadway

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GEORGIA MARBLE FLAGGING

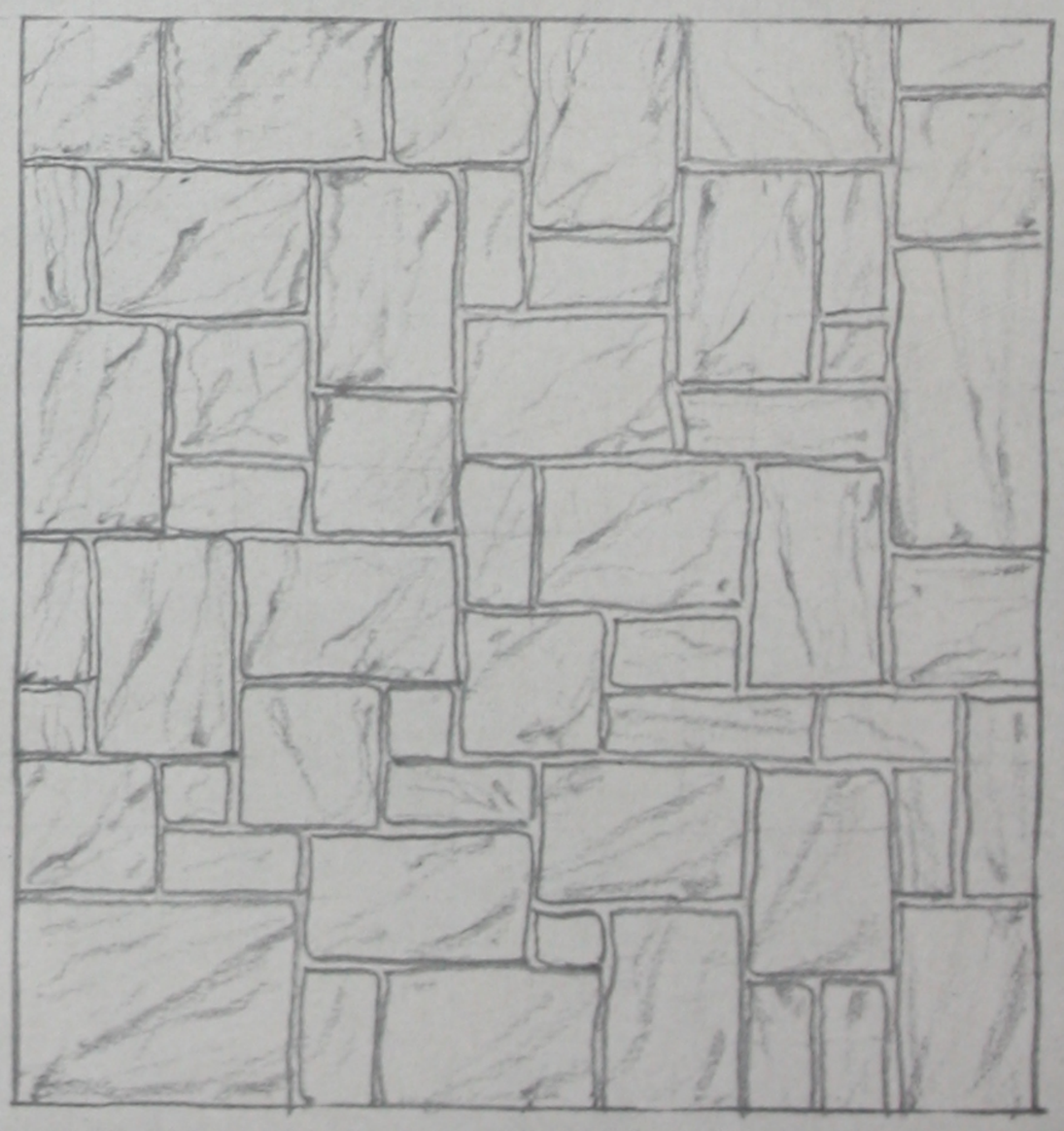
Pink Etowah — Creole
Mezzotint — White

Sawed face with Coped Edges, approximately 1″ thick, used for paving Garden walks, Terraces, Porches, Vestibules.

Laid to show approximately ½″ joints. Made in Standard Sizes, identified as follows:

No. 1	—	0′- 5½″	x	0′- 8½″
No. 2	—	0′- 5½″	x	0′-11½″
No. 3	—	0′- 5½″	x	1′- 2½″
No. 4	—	0′-11½″	x	0′-11½″
No. 5	—	0′-11½″	x	1′- 5½″
No. 6	—	1′- 5½″	x	1′- 5½″
No. 7	—	1′- 5½″	x	1′- 8½″

Blue Print of Standard Pattern Flagging Furnished Upon Request.



THE GEORGIA MARBLE COMPANY

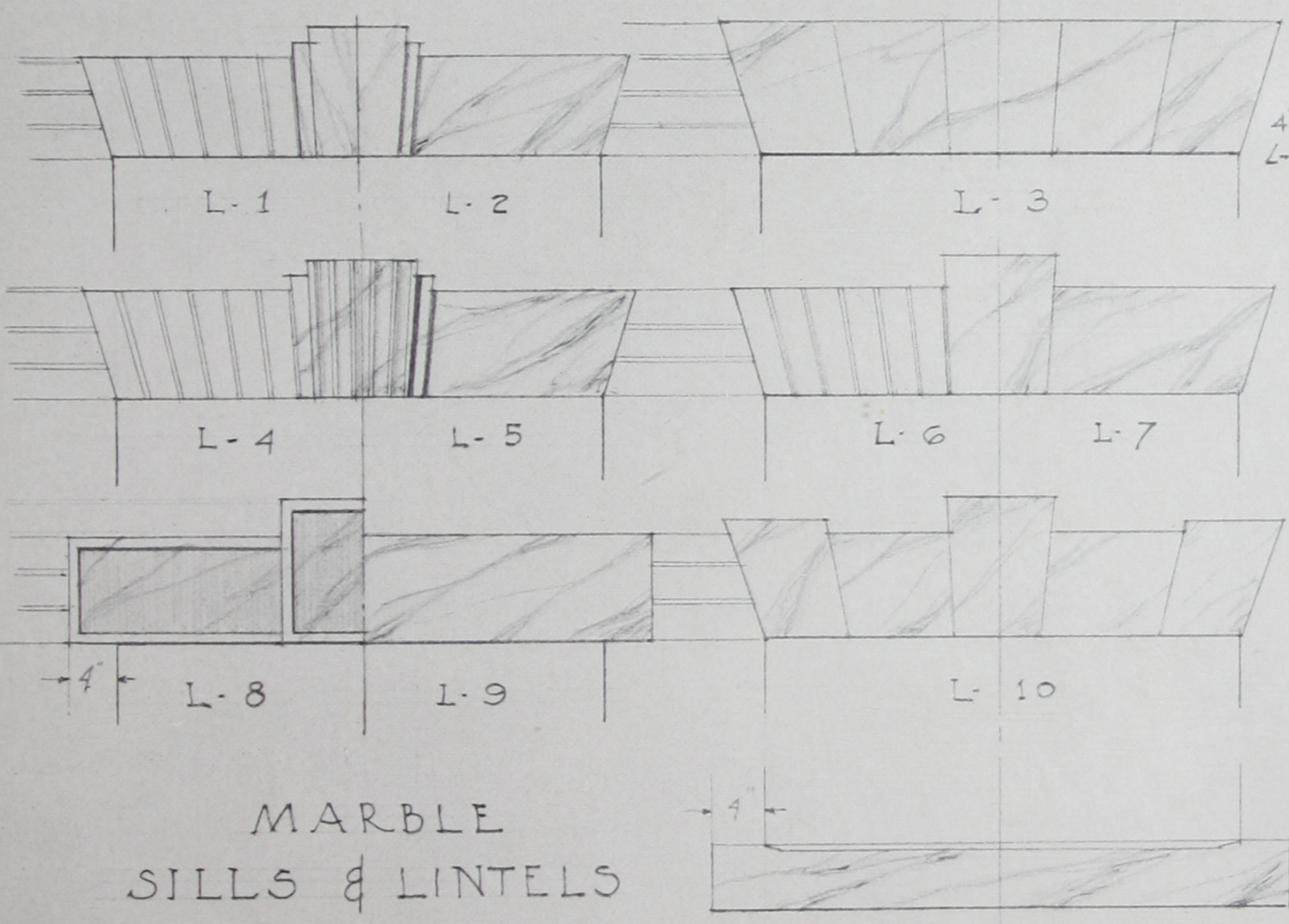
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456 Monadnock Bldg.

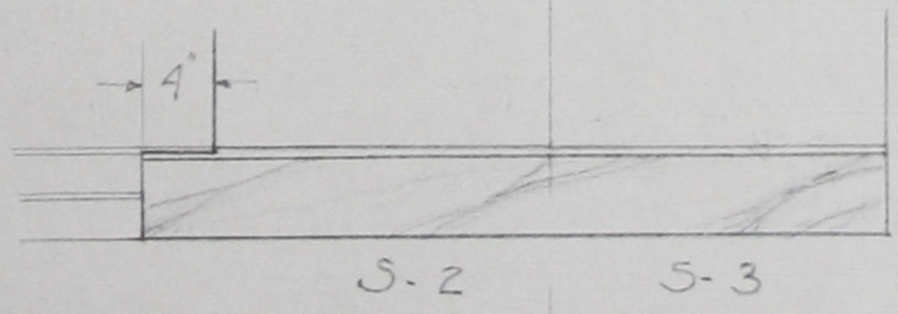


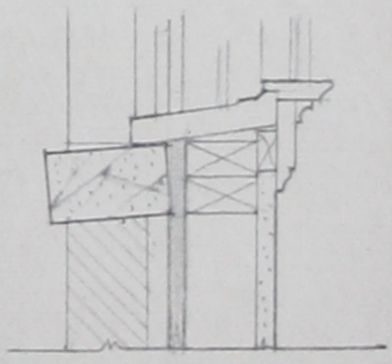




MARBLE SILLS & LINTELS

OPENINGS
2'-10"
3'-0"
3-2"
3'-4"
3'-6"





THE GEORGIA MARBLE COMPANY
TATE, GEORGIA

NEW YORK
1328 Broadway

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CHICAGO
456 Monadnock Bldg.

ENTRANCE
IN MARBLE

Design
No. 2.



THE GEORGIA MARBLE COMPANY

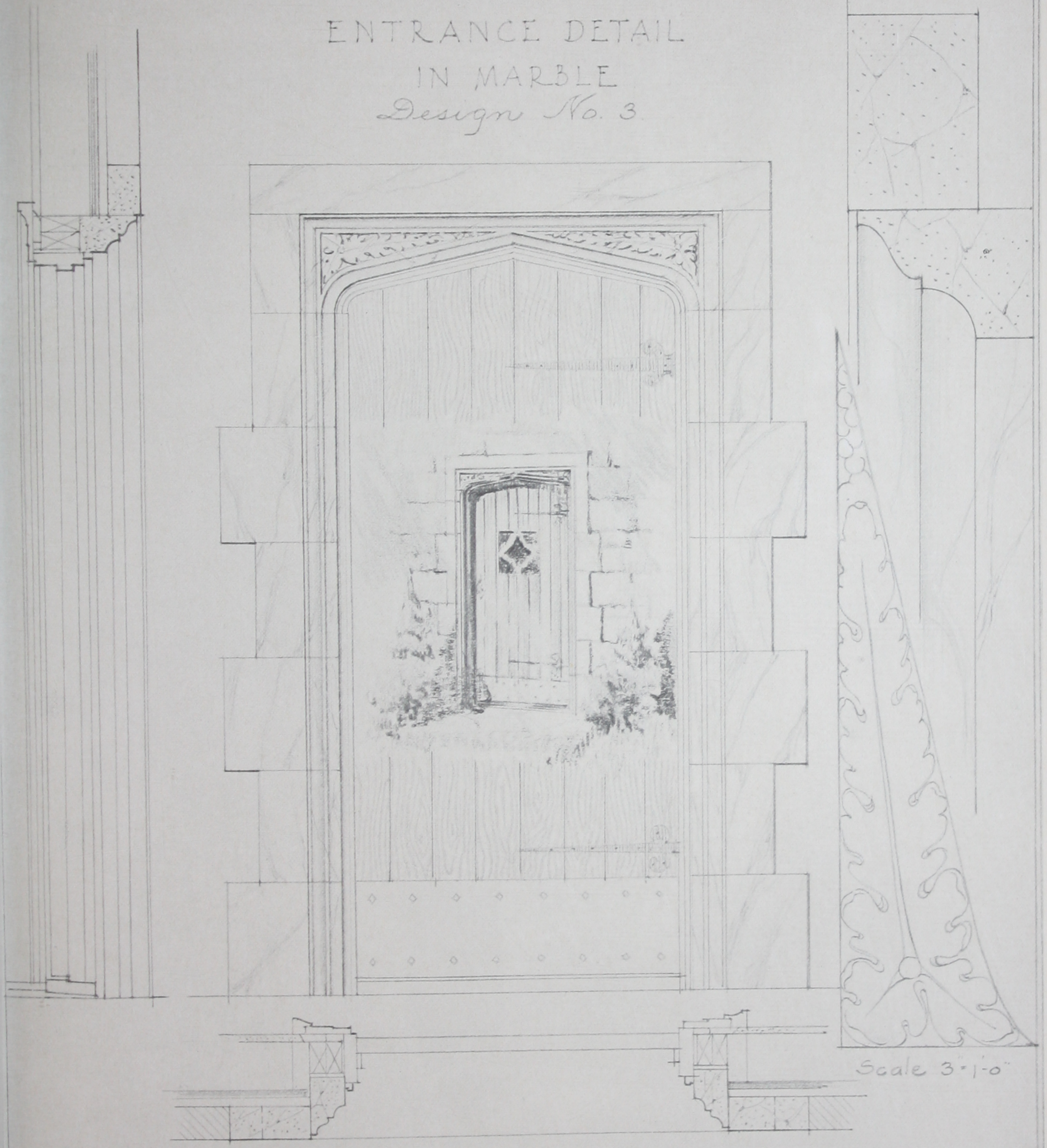
TATE, GEORGIA

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CHICAGO
456 Monadnock Bldg.

ENTRANCE DETAIL
IN MARBLE
Design No. 3.



Scale 3"-1'-0"

Scale $\frac{3}{4}$"-1'-0"

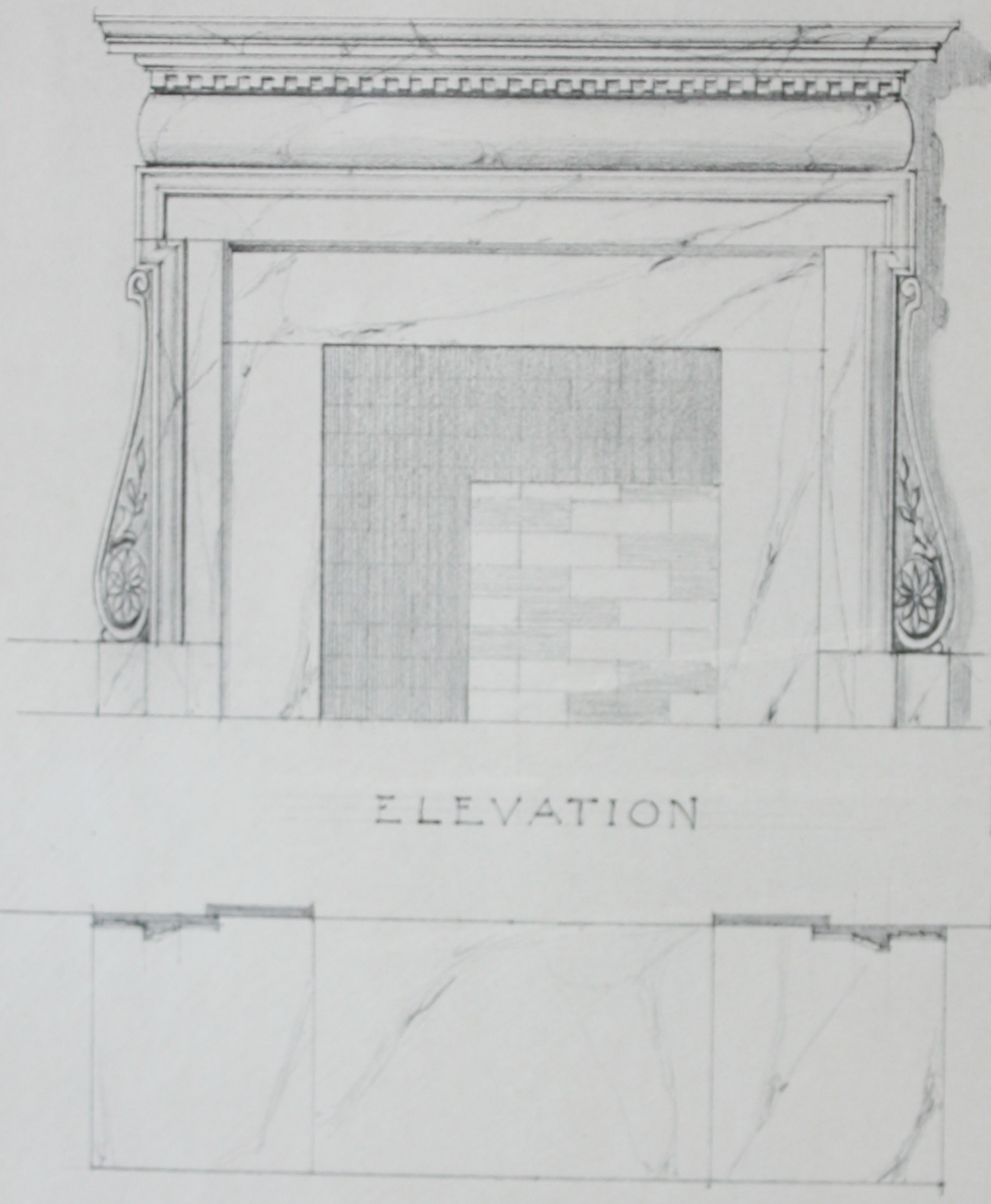
THE GEORGIA MARBLE COMPANY
TATE, GEORGIA

NEW YORK
1328 Broadway

ATLANTA
Bona Allen Building

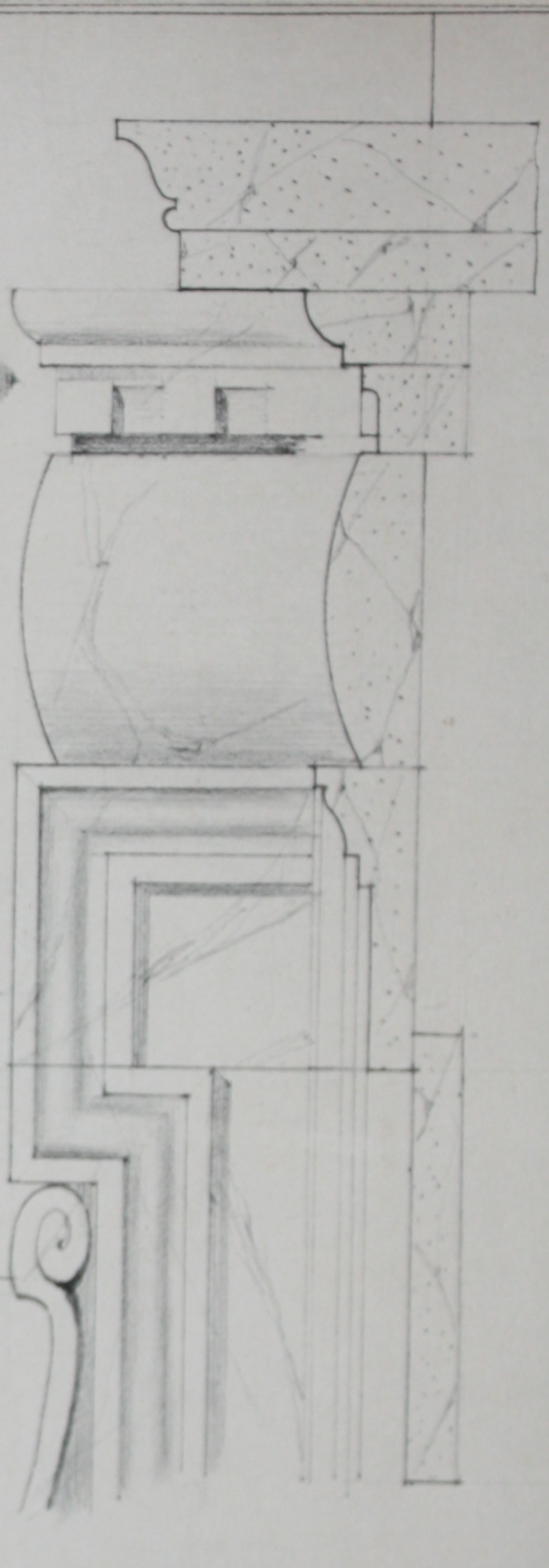
CHICAGO
456 Monadnock Bldg.

GEORGIAN PERIOD
MANTEL
Design No. 103

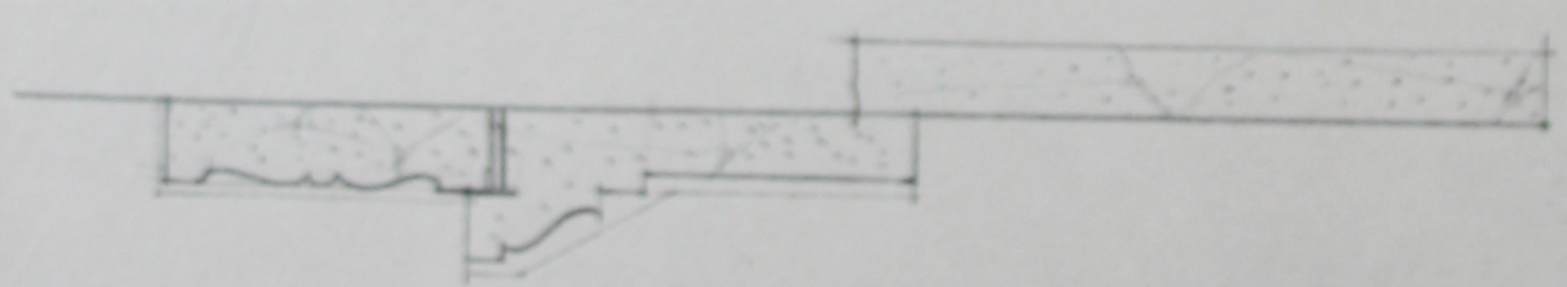


ELEVATION

HEARTH
Scale 3/4"=1'-0"



SECTION



DETAILS
Scale 3"=1'-0"

Width of shelf — 5'-9"
Height of shelf — 4'-8"
Width of body — 5'-0"
Fire Opening — 2'-6"x2'-8"

THE GEORGIA MARBLE COMPANY
TATE, GEORGIA

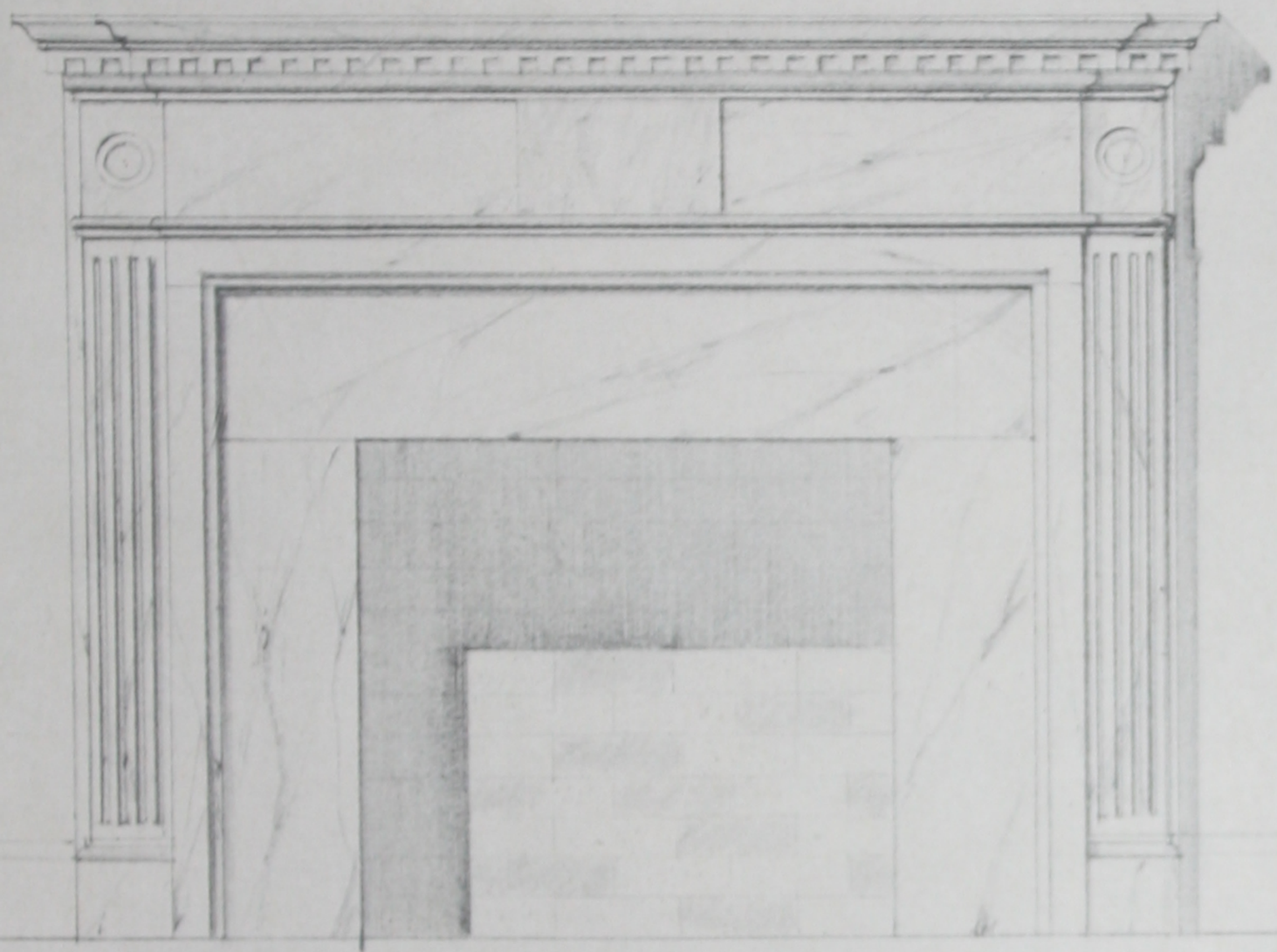
NEW YORK
1328 Broadway

ATLANTA
Bona Allen Building

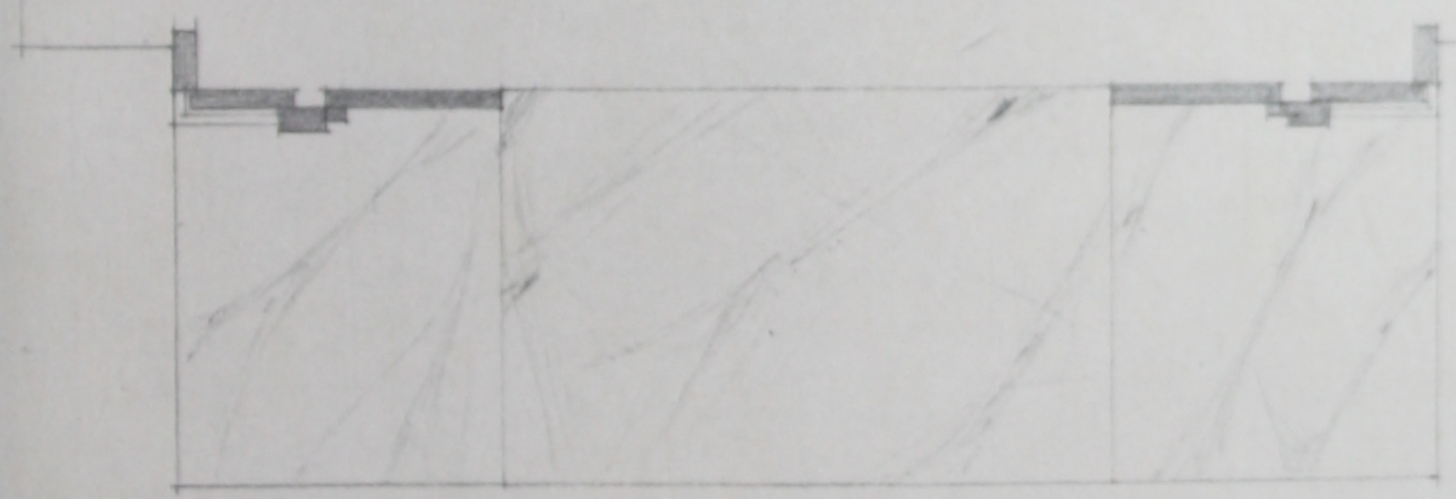
CHICAGO
456 Monadnock Bldg

COLONIAL MANTEL

Design No. 105

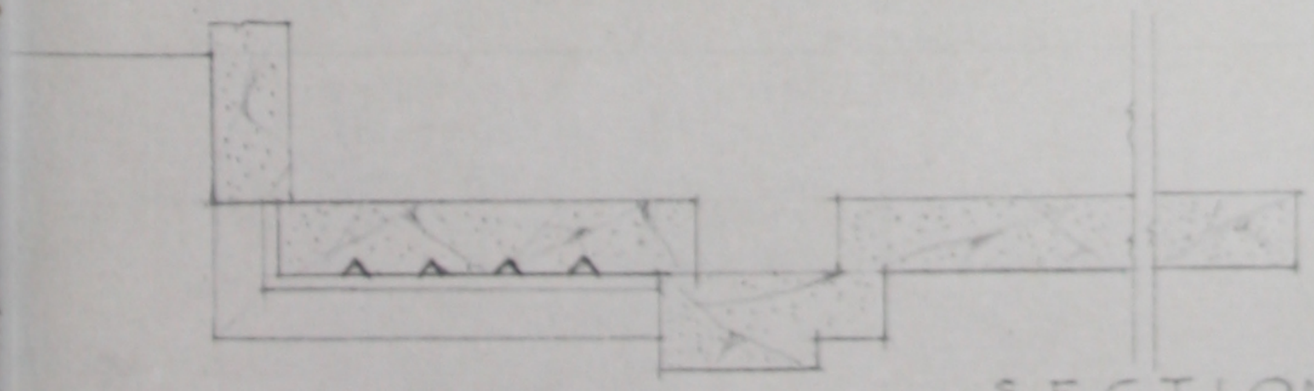


ELEVATION

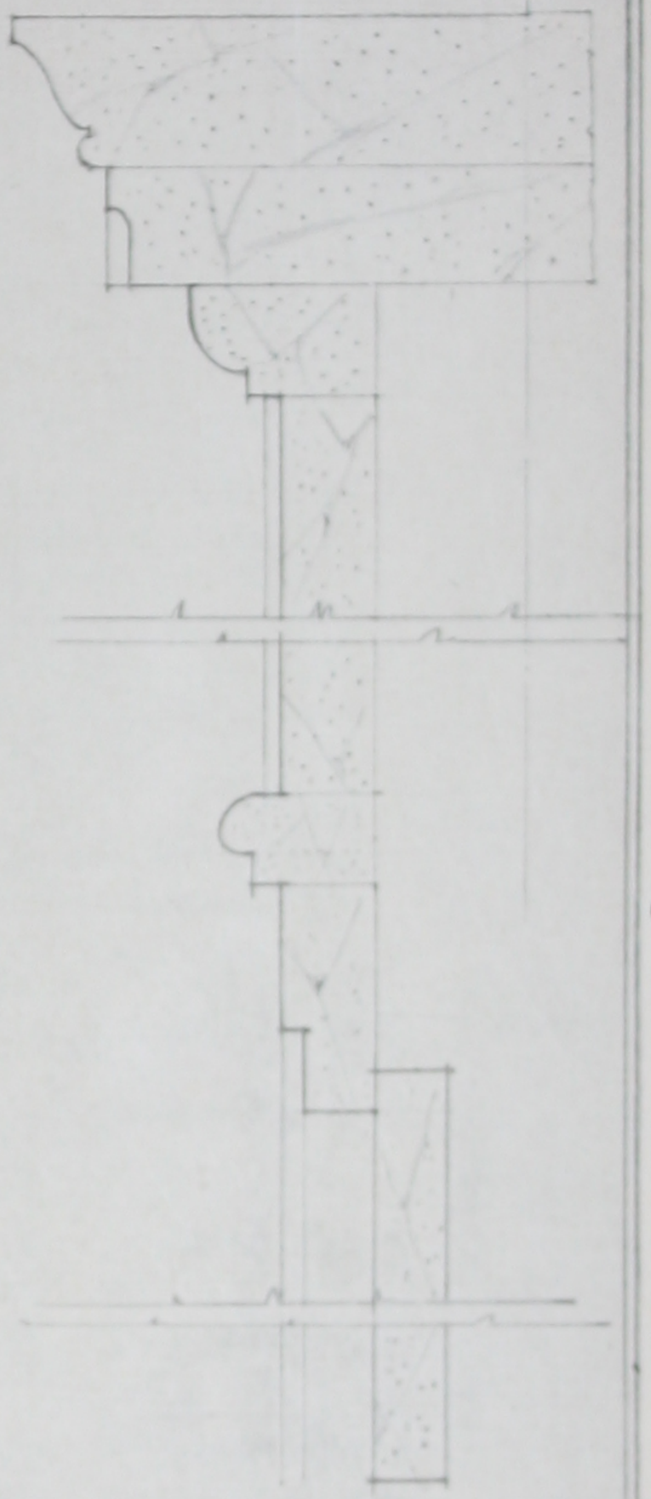


HEARTH

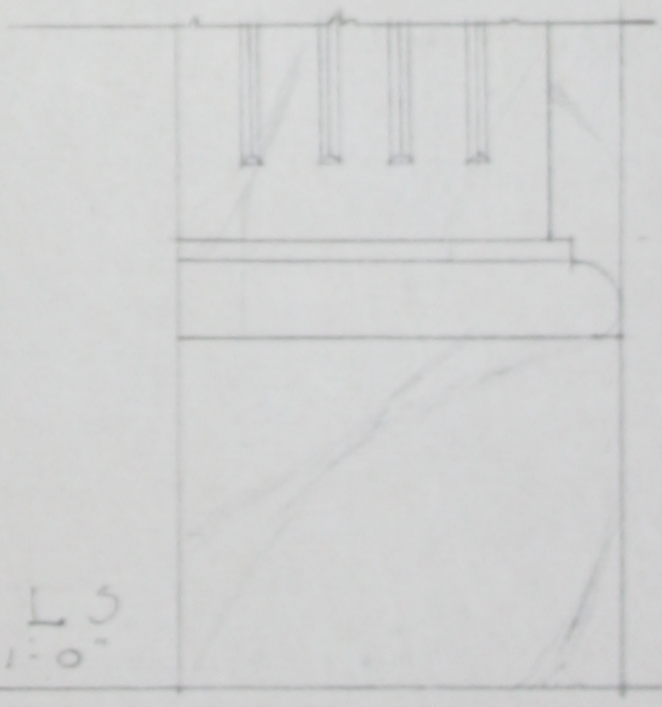
Scale $\frac{3}{4}$" = 1'-0



SECTION



SECTION



DETAILS

Scale 3" = 1'-0"

Width of shelf - 6'-0"
Height of shelf - 4'-7"
Width of body - 5'-6 $\frac{3}{4}$"
Fire opening - 2'-6" x 2'-8"

THE GEORGIA MARBLE COMPANY

TATE, GEORGIA

NEW YORK
1328 Broadway

ATLANTA
Bona Allen Building

CHICAGO
456 Monadnock Bldg.

Specifications *for* Exterior Marble

1. *Work Included:*
   Here describe parts of the work to be marble.

2. *Kind and Quality:*
   All stonework specified to be marble shall be (insert color and grade) Georgia Marble obtained from quarries having capacity and facilities for producing the stone and cutting same so as not to delay the work. All marble shall be of compact structure, hard and practically non-absorbent showing by analysis, to contain not less than 98% calcium carbonate. It shall be free from seams or defects which will impair its strength or durability—and all exposed surfaces shall be free from stains, discolorations or other defects marring its appearance.

3. *Samples:*
   Large samples of size to be fixed by the architects shall be submitted for approval before commencing the work. These samples shall show the extreme variation in color, veining and clouding and shall show all the different finishes required in the work.

4. *Shop Drawings:*
   Drawings in triplicate showing in detail the position of all joints, depth of bond, projections, etc., shall be submitted to the architects for approval before cutting begins. These drawings, after final approval by the architects shall be numbered to identify each stone and fix its position, and used for setting plans.

5. *Cutting and Finishing:*
   All exposed surfaces must be cut true and out of wind, free from waves, projections or depressions, and in accord with the approved shop drawings.
   The depth of stones shall be as shown by the approved shop drawings. The thickness of beds and joints shall be uniform 3/16 inch. The finish to be used on the different portions of the work shall be as follows:

   All plain surfaces shall be given a bush-hammered finish similar to but finer than crandled work and obtained by the use of a bushing tool in a pneumatic hammer over the surfaces previously trued up by machinery. The architect to select from samples showing variation in the fineness of this finish, one to be used.

   All mouldings, belts, cornices, architraves and trim to have a fine axed finish obtained by the use of a plain drove tool in a pneumatic hammer over surfaces previously cut to form by planning, turning or by hand cutting.

   Fine axed work to show tool marks about 10 to 12 lines per inch. These lines to run vertically except on mouldings, the lines shall be parallel with run of the moulding.

   (Describe here other desired finishes).

   All carving shall be executed in a spirited and artistic manner from plaster models furnished therefor. Carving shall have a chisel finish of a character approved by the architect. All projecting stones, such as sills, belt courses, etc., shall have a grooved drip on underside according to full size details. Steps and platforms, unless otherwise indicated, shall have wash of 1/8 inch per foot.

   All stones shall be carefully crated to protect them against any damage in shipping and handling before setting.

6. *Setting:*
   The stone shall not be set at any time more than two courses in advance of the backing and no stone having a greater width of bed than the one below it shall be set until the lower course is backed up. All stone shall be brushed clean immediately before setting. Each stone shall be set in a full bed of plastic mortar and tapped home with a wooden mallet. All joints shall be thoroughly filled and all joints raked out ¾" deep from face for pointing.

   Care must be taken in setting all stone to prevent the bearing of the stone on edges so as to cause undue stress. Sills, etc., subject to unequal pressure shall be bedded only at the ends.

   All stone shall be securely bonded or anchored in place, except where special anchoring is required, all stones with less than 9 inch beds and all stones more than 18" high shall be tied back with at least one 1¼ inch by ¼ inch wrought iron anchor for each stone for every 2 feet or portion thereof in length. Cornices and stones having great projections to be secured in place by special anchors as detailed.

   All stone anchors and cramps not specified to be galvanized or brass shall be heavily coated with asphalt.

7. *Setting Mortar:*
   The mortar used for setting stones shall be composed of approved white non-staining Portland cement, sharp washed sand and lime putty. No more lime shall be used than required to retard the setting of the mortar sufficiently for the proper bedding of the stones, and the mortar must have the strength and set up with the hardness of one to three (1-3) Portland cement mortar.

8. *Cleaning and Pointing:*
   On completion the stone work shall be washed down with stiff bristle brushes, clean water and an approved soap powder. The use of acid will not be permitted. After cleaning down, the joints to be neatly pointed up with mortar composed of 1 volume of non-staining cement and 2 volumes of clean white sand. Joints to be thoroughly wet before pointing and mortar packed in solidly filling the joints.

Specifications *for* Laying Marble Tile Floor

The cinder fill should be brought to approximately 3 inches of the finished floor level, thoroughly tamped down, sprinkled, and all loose material removed. Prepare a mixture of cement and clean, screened sand for mortar purposes, consisting of one part cement and three parts of sand. This should be mixed thoroughly before wetting to avoid "lumping" of cement. Only enough water should be added to bring this mixture to "setting" state, care being taken to avoid a too wet mixture, which would cause tile to float while being bedded down.

Bed down tile on mortar bed, leaving same to set for twenty-four hours without molestation. Drench floor with plain water. Thoroughly fill in joints with pure cement grout; clean surfaces. Rub down to smooth finish with No. 80 Carborundum Stone, making all surfaces true, and finish with fine sand stone to remove any scratches.

Specifications *for* Standing Work

Setting Marble Base, Die, Cap, Wainscot and Other Standing Work

Provide anchors of copper wire concealed in edges (or top if available). There should not be less than four anchors to any stone containing as much as ten superficial feet. Provide more anchors in proportion to size of stone. Each piece of base should have not less than four anchors; two top and two bottom unless base runs below finish floor, in which case bottom anchors can be omitted. Anchor all cap pieces at each end. Provide bottom goose-necks to all cap pieces, occurring at least every three feet. All anchors should be securely plugged into marble and fastened into tile, concrete or brick walls with moulding plaster (quick setting). Back up all standing work with spots of same plaster, distance between spots not to exceed fifteen inches in either direction.

Setting Stair Work

Provide not less than four anchors to each riser, securing same as outlined for "standing work," and backing up the same. Drench the rough forms to prevent drying out of plaster and mortar when applied.

Butter top edges of risers with plaster Paris mixed thin. Spread over the tread surface of the rough form a mixture of cement mortar, similar to that used in floor laying.

Bed down treads on riser and cement mixture. Leave several spots on tread surface of rough form on which plaster spots (quick setting) may be placed to hold tread while cement mixture sets.

Setting Bank Screen Work

Follow specifications for "standing work" on all screen work to ledge height. All bases, pilasters, cap, cornices, etc., should be doweled together, using heavy copper dowels (in no case less than 1/4 inch diameter). Butter all butting edges with moulding plaster and fill all dowel holes with a slush of same material.

Specifications *for* Interior Marble Work

1. All Marble shall be Georgia Crystalline Marble furnished by the Georgia Marble Company, set under this heading as shown on plans and hereinafter specified, including the following:

2. (In general terms describe the scope of the marble work.)

3. The contractor for marble work shall state in his bid the addition or deduction for the following alternates:

4. (Here state nature of alternates.)

5. *Detail and Shop Drawings.* Full size drawings will be furnished by the architect for all moulded and ornamental work, and these must be followed accurately in the execution of the work. The contractor shall furnish all required setting drawings and furnish copy of same to the architect for approval.

6. *Samples.* Average samples of the marbles specified, showing finish, texture, etc., shall be submitted to the architect for approval before any of the work is cut or finished.

7. *Construction.* Intersecting profiles and angles shall be carefully connected and cut, and all plane surfaces shall be true and out of wind. All work shall be carefully fitted and set, bedded in and backed up with mortar.

8. *Protection.* All work herein included shall be carefully protected during the progress of the work.

9. *Marble Thresholds.* Where marked on plans, furnish (specify grade) marble thresholds, ( ) thick, of proper width as detailed, to have beveled edge (or set flush as called for), and to be properly fitted to jamb and plinths.

10. *Marble Plinths.* Where marble base is called for, provide (specify grade) marble plinth blocks same height as base and of width and thickness to properly receive base and door trim.
11. *Special Work.* (Designate nature and extent of any special work not clearly shown or hereinbefore described.)

12. *Marble Floors.* Where shown on plans, marble floors shall be (grade) marble, 7/8 inch thick sand rubbed and laid with close uniform joints. Provide suitable border to match, as detailed.

    Note—Stock tile sizes are 8 inches by 16 inches and 10 inches by 20 inches.

13. *Marble Stairs.* All stairs so shown on drawings shall have marble (specify grade) treads, platforms, risers and skirtings of the sizes marked on details. Skirtings shall extend around all walls, piers, landings, etc., in connection with stairs, and line with top of base on the respective floors.

14. *Wainscoting.* Furnish and install marble wainscot ( ) high wherever indicated on plans consisting of base die and cap of height shown on detail drawings. Wainscoting shall continue up wall side of all stairs where marble treads and risers are specified or shown unless otherwise indicated.

15. *Trim.* All doors opening into corridors and lobbies shall have moulded architrave as shown on detail drawings.

16. *Stools.* All windows in exterior walls shall have marble stools ( ) thick, to project at front and ends as shown on scale detail of typical window opening.

17. *Drinking Fountains.* Furnish and install marble drinking fountains where shown on plans, cut as shown on detail drawings.

18. *Plumbing Marble.* Furnish and set the marble (wainscot, partitions, stiles, caps, etc., as required) throughout all toilet rooms, as shown on drawings and scale details. Toilet room wainscot shall be ( ) high by 7/8 inch thick. Where windows occur below top of wainscot, provide marble stool ( ) thick, together with jamb pieces to line with top of wainscot. Stall partitions shall be ( ) high and ( ) thick. Intermediate partitions shall be 7/8 inch thick, set ( ) above the floor, and let into wall wainscot and hanging stiles.

19. All hanging stiles shall be ( ) thick and shall be grooved to receive partition and shall extend at least 1 inch below floor.

20. Urinals in men's and boys' toilet rooms shall be of the ( ) type and shall have 7/8 inch thick partitions of (specify grade) and marble with rounded tops ( ) high and ( ) thick.

21. Provide marble cap (specify size) across fronts of all water closet compartments, securely doweled into stiles. Where water-closet backs are furred out to clear pipes, provide and set marble cap or shelf over pipe space.

22. All N. P. brass angles, braces, bolts and other hardware for setting of plumbing marble shall be furnished by setting contractor.

23. *Setting.* Set all floor marble in a solid bed of cement mortar, completely filling all joints with this grout after floors are laid. All standing marble shall be set with heavy copper wire, doweled into the marble and securely fastened to the backing.

24. *Finish.* All marble shall be highly polished (or honed) except stair treads, thresholds and floor marble, which shall be fine sand rubbed. All wainscot and wall work shall be closely matched for color, veining, etc.

25. *Jobbing.* In general, do all cutting and jobbing for marble work in its connection with the other trades.

26. *Cleaning.* All chips and rubbish shall be removed at the completion of the work, and all work shall be cleaned and left in a perfect condition, all to the satisfaction of the architect.

COLORS

and

FINISHES

AVAILABLE

in

GEORGIA

MARBLE

Just as a photograph of a diamond fails to show the play of reflected and refracted light rays, that make this stone the king of gems, so do the photographs of Georgia Crystalline Marble, reproduced in this section, fail to show the bright sparkle that emanates from the myriad of clear crystals that make up its structure. The reproductions are intended for use as an index of color and pattern. For this purpose they are satisfactory and illustrate the color and veining of average samples of the marble.

GEORGIA
Crystalline White

Georgia Crystalline White has the smallest percentage of color particles of any of the Georgia Marbles. It is a multitude of transparent crystals of calcium carbonate that reflect and multiply the few particles of white opaque magnesium carbonate. Here and there, through the stone there are just enough of the light bluish tints to break up the monotony of the solid color.

Georgia Crystalline White has been used in some of the nation's largest and finest buildings and memorials.

Georgia Crystalline White when furnished for exteriors is most often used in the Axed finish or in the Bush Hammered finish, illustrated on pages 54 and 55.

Its frequent use in the memorial type of structure is easily explained by its attractive color appearance.

GEORGIA CRYSTALLINE WHITE

GEORGIA CRYSTALLINE WHITE

Axed Finish

GEORGIA CRYSTALLINE WHITE

Bush Hammered Finish

GEORGIA
Crystalline Pink

Georgia Crystalline Pink varies in color from old rose to deep pink with greenish black and gray veinings. The appearance of this marble is always beautiful no matter in what finish it is used.

With its variety of colors, its unusual patterns and its crystalline property of reflecting and refracting light, Georgia Crystalline Pink is a marble ideally adapted to both exterior and interior work.

Often it is used as a trim with Georgia Crystalline White, where it is advisable to break up the effect of the monotone.

Because of its warmth it has been effectively used for bank buildings and churches. It is ideally adapted for public building construction. It has often been selected for many of the nation's most handsome residences. In fact, the uses of Georgia Crystalline Pink are practically unlimited.

From the reproductions shown on the following pages you can see that this marble is beautiful in any of the standard finishes. The Axed and Hammered finishes are, of course, recommended primarily for exterior work.



(Etowah) Georgia Crystalline Pink

(Etowah) Georgia Crystalline Pink

Axed Finish

(Etowah) Georgia Crystalline Pink

Bush Hammered Finish

GEORGIA
Crystalline Cherokee

Georgia Crystalline Cherokee is a beautiful marble of exquisite coloring and pleasing pattern. The color particles are distributed by nature in such manner as to produce waves and clouds in delicate design.

In this marble one readily notes the transparency of the crystals. Those clouds of color that lie on the surface are sharply defined. Yet, below the surface we can see, through the clear crystals, hidden pools of color that are hazy in their boundaries because of their distance from the surface.

The effect, as you can imagine, is most beautiful and most unusual. To those who are accustomed to marbles in which only surface patterns are revealed, Georgia Crystalline Cherokee and many of the other Georgia Marbles are naturally an agreeable surprise.

Georgia Crystalline Cherokee is recommended for all uses, both exteriors and interiors. It may be had in all of the standard finishes — Polished, Honed, Axed, Bush Hammered, etc.



GEORGIA CRYSTALLINE CHEROKEE

GEORGIA
Crystalline Creole

In Georgia Crystalline Creole the pattern is considerably bolder and richer than in Georgia Crystalline Cherokee. It is interesting to note that the color is almost totally absent from the white background and predominates in the various dark markings. Therefore, the contrast is sharp and the veining is distinct and beautiful. Because of its bold veining Georgia Crystalline Creole is particularly adapted to the creation of beautiful effects in matched panels.

Because of its color it is an ideal marble for use in interior treatments. Where dark tone effects are desired in exteriors its use is always well advised. Such an effect is illustrated on page 28, where Georgia Crystalline Creole has been used as trim in combination with White Georgia Ashlar. As an interior marble it is capable of furnishing most striking and pleasing effects.

Georgia Crystalline Creole is available in all standard finishes. When Axed or Bush Hammered it presents, of course, a darker appearance than do either Georgia Crystalline White or Georgia Crystalline Cherokee.



Georgia Crystalline Creole

GEORGIA
Crystalline Mezzotint

Georgia Crystalline Mezzotint is a combination of dark designs on a gray background. The gray tone that predominates has graphite and a minor proportion of other color particles evenly distributed through it. Over this gray field spread an endless number of little rivers of darker color that here and there are sharply defined and in other places are vignettes that are scarcely discernible against the background.

Georgia Crystalline Mezzotint is the crystalline marble of gray color and hence is used most often in those places where a subdued tone is desired. It is much used in interior work, finished Axed or Bush Hammered where a monotone is desired. The effect obtained by the Bush Hammered or Axed finish is to practically obliterate the stronger color vein, which produces a soft and even tone of gray.

In color it is a perfect foil for both Georgia Crystalline White and for Georgia Crystalline Creole. At times it has been used most effectively with Georgia Crystalline Pink.

Georgia Crystalline Mezzotint is available in all standard finishes. It has been used by prominent architects all over America.



GEORGIA CRYSTALLINE MEZZOTINT

GEORGIA
Verde Antique

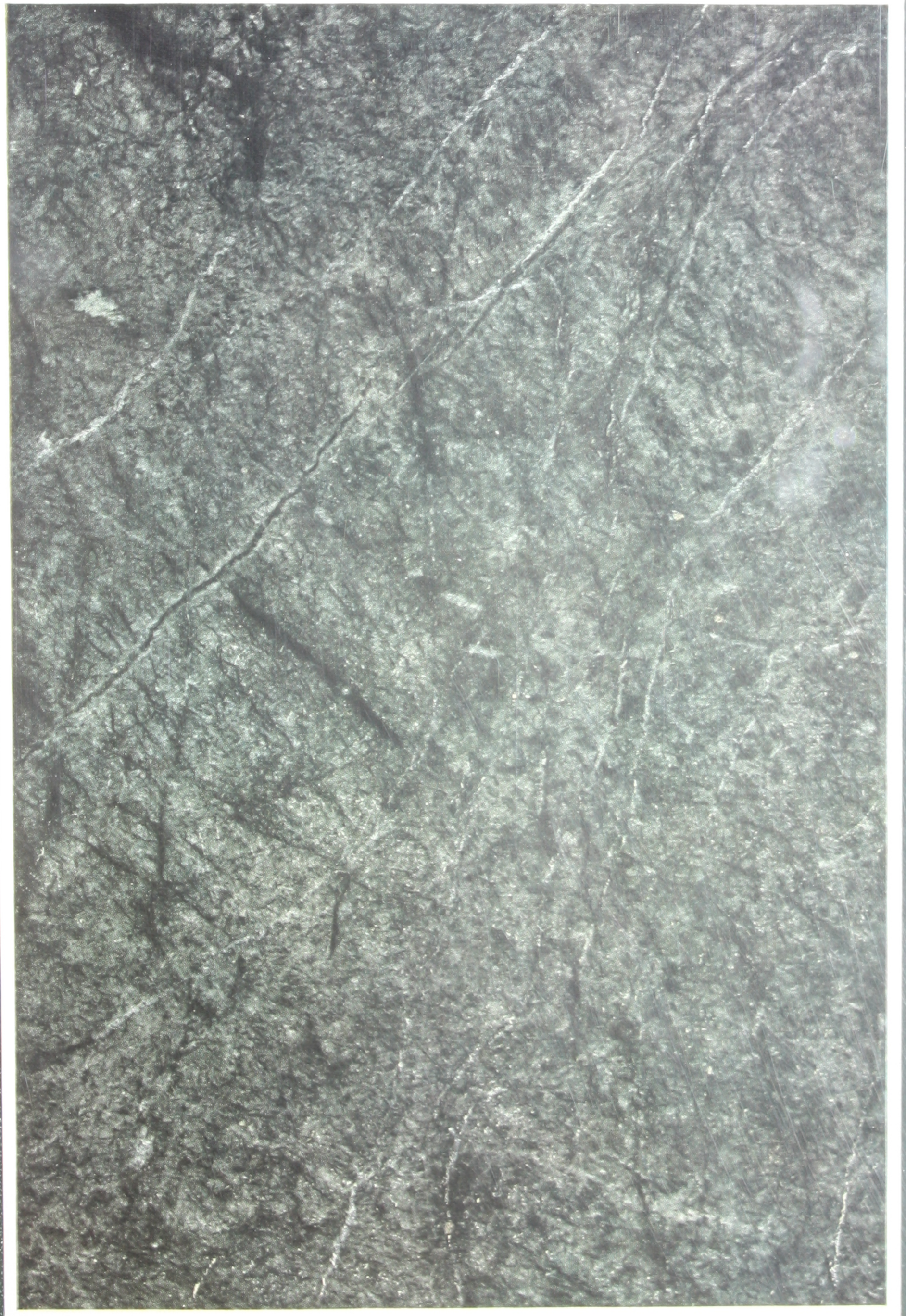
Georgia Verde Antique is the only Georgia Marble which is not of crystalline formation. Therefore the photograph reproductions of this marble more nearly duplicate the actual appearance of the stone than do any of the other photographs.

The marble is richly colored and richly patterned. Georgia Verde Antique is one of the handsomest marbles of the green variety quarried.

Due to its characteristics, Georgia Verde Antique is used with a polished finish.

The richness of Georgia Verde Antique suggests its uses. Primarily it is recommended for use as a trim. In color tone it either harmonizes or pleasingly contrasts with practically every stone with which it is used.

Until very recently Verde Antique has not been available. Now, however, the Georgia Marble Company is pleased to announce that this marble is being quarried in volume and that quantities sufficient to care for architects' needs can be furnished.



GEORGIA VERDE ANTIQUE